



## Hearing loss, health, stress and work-life

*How to reduce labour market stress among persons with hearing loss*

Lund, Katja

DOI (link to publication from Publisher):  
[10.5278/vbn.phd.hum.00005](https://doi.org/10.5278/vbn.phd.hum.00005)

Publication date:  
2015

Document Version  
Publisher's PDF, also known as Version of record

[Link to publication from Aalborg University](#)

Citation for published version (APA):

Lund, K. (2015). *Hearing loss, health, stress and work-life: How to reduce labour market stress among persons with hearing loss*. Aalborg Universitetsforlag. Ph.d.-serien for Det Humanistiske Fakultet, Aalborg Universitet  
<https://doi.org/10.5278/vbn.phd.hum.00005>

### General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal -

### Take down policy

If you believe that this document breaches copyright please contact us at [vbn@aub.aau.dk](mailto:vbn@aub.aau.dk) providing details, and we will remove access to the work immediately and investigate your claim.



# **HEARING LOSS, HEALTH, STRESS AND WORK-LIFE**

**HOW TO REDUCE LABOUR MARKET STRESS AMONG  
PERSONS WITH HEARING LOSS**

**AF  
KATJA LUND**

**PH.D. AFHANDLING 2015**



**AALBORG UNIVERSITET**



# **HEARING LOSS, HEALTH, STRESS AND WORK-LIFE**

**HOW TO REDUCE LABOUR MARKET STRESS AMONG  
PERSONS WITH HEARING LOSS**

by

Katja Lund



**AALBORG UNIVERSITY**  
DENMARK

Dissertation submitted

Thesis submitted: October 16, 2015

PhD supervisor: Associate Professor Claus A. F. Rosenstand  
Aalborg University

Assistant PhD supervisor: Professor Marianne Lykke  
Aalborg University

PhD committee: Associate Professor Thessa Jensen  
Aalborg University  
Associate Professor Ariane Laplante-Lévesque  
Linköping University  
Senior researcher Steen Bengtsson  
The Danish National Centre for Social Research

PhD Series: Faculty of Humanities, Aalborg University

ISSN (online): 2246-123X

ISBN (online): 978-87-7112-384-5

Published by:  
Aalborg University Press  
Skjernvej 4A, 2nd floor  
DK – 9220 Aalborg Ø  
Phone: +45 99407140  
aauf@forlag.aau.dk  
forlag.aau.dk

Forsidefoto: Ditte Brøns, Photofantastic

© Copyright: Katja Lund

Printed in Denmark by Rosendahls, 2015

Normalsider: 252 sider (á 493.468 anslag inkl. mellemrum).  
Standard pages: 252 pages (493.468 characters incl. spaces).

## Mandatory sheet

1.	HEARING LOSS, HEALTH, STRESS AND WORK-LIFE - HOW TO REDUCE LABOUR MARKET STRESS AMONG PERSONS WITH HEARING LOSS
2.	Author: Katja Lund
3.	PHD supervisor: Associate Prof. CLAUS A. F. ROSENSTAND, Aalborg University  Assistant supervisor: Prof. MARIANNE LYKKE, Aalborg University
4.	<p>List of published papers:</p> <p>Paper 1: Kappelgaard, L. H., &amp; Lund, K. (2013). Ecological Momentary Storytelling : Bringing Down Organizational Stress through Qualifying. In <i>Foundations of Augmented Cognition</i> (Dylan D. S., Vol. Volume 802, pp. 572–581). Springer Berlin Heidelberg. doi:10.1007/978-3-642-39454-6_61</p> <p>Paper 2: Kappelgaard, L. H. &amp; Lund, K. (2015). <i>Er min Hovedpine min hovedpine? - om selvmonitorering og refleksive dialoger som led i forebyggelse og af-individualisering af arbejdsrelateret stress</i>. Sammenhænge i sundhedskommunikation. red. / Søren Frimann; Helle Sofie Wentzer; Mariann B. Sørensen. Vol. 2 1. oplag. udg. Aalborg : Aalborg Universitetsforlag, 2015. s. 281-310.</p> <p>Paper 3: Lund, K. &amp; Rosenstand, Claus A. F. (2015). <i>Hvordan reducerer vi stress hos erhvervsaktive med høretab? : - et dialogværktøj til at forstå og guide medarbejdere i et stressforløb</i>. Sammenhænge i sundhedskommunikation. red. / Søren Frimann; Helle Sofie Wentzer; Mariann B. Sørensen. Vol. 2 1. oplag. udg. Aalborg : Aalborg Universitetsforlag, 2015. s. 313-357.</p>
5.	<p>This thesis has been submitted for assessment in partial fulfillment of the PhD degree. The thesis is based on the submitted or published scientific papers, which are listed above. Parts of the papers are used directly or indirectly in the extended summary of the thesis. As part of the assessment, co-author statements have been made available to the assessment committee and are also available at the Faculty. The thesis is not in its present form acceptable for open publication but only in limited and closed circulation as copyright may not be ensured.</p> <p>Permission to use participant data in this thesis was given by all participants prior to the intervention study. Participant names have been altered for privacy reasons.</p>

# CV



I got my bachelor degree in Spanish and International Studies from Aalborg University in 2003. During the Cand.IT & Multimedia-study at Aalborg University in the mid 00's, I also started up the company Vistachild. Our focus was on online sign language learning and game based learning for children with an impaired hearing. In 2008 I was an e-learning consultant at Visit Nordjylland as well as the coordinator of MediaOnTheMove (mobile technology conference) in Aalborg. In June 2008 I became a project manager at Castberggård job-and-development centre and in 2012 Castberggård supported the initiation of this Ph.D. project.





# ENGLISH SUMMARY

This project has grown out of a desire to uncover the underlying factors that can explain stress and stress-related absenteeism among employees with hearing loss. The target group is persons with hearing loss who use aural communication rather than sign language in their daily communication. The study is based on a biopsychosocial stress understanding and a salutogenetic conviction, which means that different aspects and contexts in life are inextricably linked and that the totality of these contexts is essential to our ability to handle the stressors we encounter in our daily lives.

**Method.** To support this holistic understanding in identifying stressors and the ability to handle stressors among hearing-impaired employees, I have, in collaboration with PhD candidate at the University of Aalborg, Lisbeth Kappelgaard, developed the method Ecological Momentary Storytelling. The method is based on the triangulation of data where physical, psychological and social factors that can affect the experience of stress are measured. Physical factors are measured by observing the participants' heart rate variability, while psychological and social factors are measured via a mobile phone that prompts participants to assess here-and-now experiences every wake hour. In addition there is a temporal factor as the method is applied over one week. Finally the data from the test-week is reflected on during a follow-up dialogue where discoveries can be integrated in order to help the participants gain awareness on everyday contexts that may promote or inhibit the development of stress. Six hard of hearing employees aged 50-64 years employed in various Danish companies completed a week of Ecological Momentary Storytelling in the period 2013 - 2014.

**Results.** Data from the reflective dialogues were analysed on the basis of Grounded Theory and various categories became clear through three layers of coding. The main categories, that give an impression of factors important to the development and management of stress, are: 1) The experience of being able to maintain control in various communication situations and the ability to manage one's energy level over a working day. 2) The different contexts that may affect the individual's ability to maintain control in various communication situations and to preserve energy during a working day. This can be noise level, number of people in the room and generally factors that can affect communication flow and energy level in a positive or negative direction. 3) The narratives told about the individual, both by the individual himself as well as by the colleagues and management at work. These narratives define to a large extent the role and identity attached to the individual in a work context.

Data from the mobile entries in the test week were analysed and compared with the findings from the dialogues. This spurred further findings indicating that interaction with other people generally provides energy, as long as the individual does not experience a high level of noise and / or poor communication and listening conditions.

In order to handle the above factors it is necessary for each employee with hearing

loss to become aware of how one is affected by different contexts in a specific moment, and the method supports this process. But it is also necessary that the responsibility for dealing with hearing loss in the workplace is shared with colleagues and management, so that the individual is not alone. The company management may use different strategies for dealing with this. A dialogue tool was developed in this thesis, which combines survey results with the salutogenetiske theory of Sense of Coherence, in order to support professionals / managers / HR consultants in dealing with the prevention and the reduction of stress among hearing-impaired employees. Finally, an inclusion model was constructed, which clarifies the risks and opportunities that may be associated with the choice of different strategic approaches in employment of employees with hearing loss. It is recommended that the company prepare a communication policy that not only takes into account the hearing loss, but also sees effective communication as being equal to team performance and bottom line outcome.

# DANSK RESUME

Idéen om denne Ph.D. et vokset ud af et ønske om at afdække de faktorer, der ligger til grund for, at personer med høretab oplever stress, som kan resultere i stressrelateret sygefravær fra arbejdspladsen. Målgruppen er erhvervsaktive personer med høretab, som anvender det talte og auditive sprog som det primære. Studiet bygger på en biopsykosocial stressforståelse og en salutogenetisk overbevisning, der handler om, at forskellige aspekter og kontekster i livet hænger uløseligt sammen og at helheden af disse kontekster er afgørende for vores evne til at håndtere de stressorer, vi møder i vores daglige liv.

**Metode.** For at understøtte denne helhedsforståelse i en afdækning af stressorer og evnen til at håndtere stressorer hos erhvervsaktive med høretab, har jeg i samarbejde med Ph.D.-kandidat ved Aalborg Universitet, Lisbeth Kappelgaard, udarbejdet en metode, Ecological Momentary Storytelling, der er baseret på triangulering af data. Det betyder, at der både måles på fysiske, psykiske og sociale faktorer, der kan have betydning for oplevelsen af stress. Fysiske faktorer måles via monitorering af hjerterytmevariabilitet hos deltagerne, mens psykiske og sociale faktorer måles via en mobiltelefon, der prompter deltagerne til at vurdere her-og-nu oplevelser en gang i timen. Derudover er der en tidslig faktor, idet metoden applikeres hen over en uge. Afslutningsvis afholdes en refleksiv dialog med afsæt i data fra testugen, hvor erkendelser kan integreres som bevidst viden hos den enkelte. Seks hørehæmmede medarbejdere i alderen 50 – 64 år ansat i forskellige danske virksomheder gennemførte et forløb med Ecological Momentary Storytelling i perioden 2013 - 2014.

**Resultater.** Data fra de refleksive dialoger er analyseret med afsæt i Grounded Theory, og forskellige kategorier blev tydelige igennem tre kodningslag. De primære kategorier, der giver et indtryk af, hvad der i hverdagen hos de erhvervsaktive hørehæmmede har betydning for udviklingen og håndteringen af stress er: 1) Oplevelsen af at kunne bevare kontrol i forskellige kommunikationssituationer og kontrol i forhold til at kunne forvalte sin energi hen over en arbejdsdag. 2) De forskellige sammenhænge, den enkelte indgår i i det daglige, som kan have betydning for evnen til at bevare kontrol i forskellige kommunikationssituationer samt bevare energien hen over en arbejdsdag. Det kan være støj, antal mennesker i rummet, og i det hele taget faktorer, der kan påvirke muligheden for god kommunikation og gode lytteforhold samt for at opbygge energi. 3) De narrative, der lægger sig til den enkelte, hvilket både er dem, man fortæller om sig selv, og dem ens kolleger og ledelse fortæller, og som er med til at definere den rolle og identitet, man har på arbejdspladsen.

Data fra mobilindtastningerne i testugen blev analyseret og sammenholdt med resultaterne fra dialogerne. Her opstod yderligere resultater, der viser, at samvær med andre mennesker ser ud til generelt at bidrage med energi, så længe den enkelte ikke oplever støj og/eller at kommunikations- og lytteforholdene er dårlige.

For at kunne håndtere ovenstående forhold, er det nødvendigt for den enkelte medarbejder med høretab at blive bevidst om, hvorledes man påvirkes af forskellige kontekster i nuet, hvilket metoden kan bidrage til. Men det er også nødvendigt, at ansvaret for at håndtere høretabet på arbejdspladsen deles med kolleger og ledelse, således at den enkelte ikke står alene. Virksomheden kan anvende forskellige strategier, og der er i denne afhandling udarbejdet et dialogværktøj, som kombinerer undersøgelsens resultater med den salutogenetiske teori om Oplevelse af Sammenhæng, hvor en professionel/leder/HR-konsulent i samarbejde med medarbejderen kan arbejde med forebyggelse og reduktion af stress. Endelig er der udarbejdet en inklusions-model, der tydeliggør de risici og muligheder, der kan være forbundet med valget af forskellige strategiske tilgange ved ansættelse af medarbejdere med høretab. Der argumenteres for, at virksomheden udarbejder en kommunikationspolitik, der ikke blot tager hensyn til høretabet, men som ser effektiv kommunikation som værende lig med effektive teams, der kan gavne virksomheden på bundlinjen.

# ACKNOWLEDGEMENTS

*To Adam and Bertram*

*My sweet boys – you have been so patient! And you have been my greatest support through the love that we share. You are my rocks and you rock my world!*

*To my parents*

*Your support has been indispensable! The closeness, love and warmth you represent to me and my boys is invaluable and has carried me through difficult times. Thank you!*

## Also thank you to...

... Castberggård and in particular to Niels Nielsen, who together with Aalborg University made the Ph.D. candidature possible. Niels unfortunately died very suddenly in 2014 and I have in particular thought about him when struggling with the thesis and things were especially tough. He said already early in the project: *“My biggest worry is that you’ll get lonely – I know it’s a lonely process”*. Well Niels, I was never completely alone. I felt you very close by at times ...

And in this regard I would like to give a special thanks to Lisbeth Kappelgaard for making things less lonely! For being the world’s best ‘metode-elektrode-buddy’ and for being my loyal co-author and friend.

Also thank you to Aalborg University and in particular my supervisor, Claus A. F. Rosenstand, who did a great job both paving the way for the Ph.D. to become a reality, for giving superb supervision and for co-authoring – your engagement and brilliant mind has brought interesting perspectives, drive and a motivation into my work. And thank you to my assistant supervisor, Marianne Lykke, for supervising me in the best manner, for great talks and for being an inspiration both as a professional and a human being.

A sincere thank you to the people who were there to discuss the project as it was merely an idea and who both in the beginning and throughout the project have helped me gain a wider perspective on the situation of people with hearing loss. Those people are among others: Erik Brodersen, Ole Vestergaard, Kis Brandt Petersen, Flemming Wang Jensen, Vibeke Møller, Karin Vilstrup Clausen, Anne-Mette Mohr + the people at House of Hearing and the National Hearing Association. I would like to thank all my colleagues and the management at Castberggård for showing an interest in my work and for supporting me.

My colleagues at Aalborg University deserve special thanks for being there to discuss matters great and small – you are the ones who truly understood, what I meant at times and what I was going through when things got tough. And to those of you I got the opportunity to work with in teaching situations: It has been a great learning experience and a lot of fun. Thank you! In this regard I would like to thank the students at Aalborg University who have made teaching educational, interesting and fun to me. I hope at least to some extent that it was reciprocal!

I also would like to thank Sophia Kramer and the research team at the department of Otolaryngology-Head and Neck Surgery, section Audiology, EMGO+ Institute at the VU University Medical Center in Amsterdam for taking good care of me, for your inspiration and for the supervision i received.

Last but not least I would like to thank the participants in this study. THANK YOU for your engagement, patience, courage and ‘great’ data! Wish you all the best.

# TABLE OF CONTENTS

<b>Chapter 1. General introduction</b>	<b>23</b>
1.1. <i>Hearing loss: a widespread condition affecting lives</i>	23
1.2. <i>Motivational contexts</i>	25
1.2.1. Personal motivational contexts	26
1.2.2. Political motivational contexts	27
1.2.3. Professional motivational contexts	28
1.1. <i>Experiences from Castberggård</i>	29
1.2. <i>Area of interest</i>	31
1.2.1. State of the art	31
<b>Chapter 2. Research question</b>	<b>34</b>
2.1. <i>Structure of RQ, articles and contributions</i>	35
2.1.1. author collaboration	36
2.2. <i>research dissertation</i>	37
<b>Chapter 3. Work method</b>	<b>39</b>
3.1. <i>HumanSensing</i>	39
3.2. <i>construction of ecological momentary storytelling</i>	40
3.2.1. a pile of data in 'no time'	41
3.2.2. system functionality	42
3.2.3. privacy and ownership	42
3.2.4. content and questions deriving from theory	43
3.2.5. content and questions deriving from praxis	43
3.2.6. Designing the esm	56
3.2.7. Methodological considerations	59
3.3. <i>Grounded theory</i>	59
<b>Chapter 4. Conceptual framework</b>	<b>61</b>
4.1. <i>CQ1: Labour market attachment</i>	62
4.1.1. Flexibility and routine	62
4.1.2. Voicing criticism	64
4.2. <i>CQ2: Psychosocial health and hearing loss</i>	65
4.2.1. Psychosocial health	65
4.2.2. Health at work	66
4.2.3. The need for recovery	67



4.2.4. Memory	67
4.3. <i>CQ3: A holistic perspective</i>	70
4.3.1. Understanding functioning, disability, and health	72
4.3.2. Similar medical conditions – diverse experiences and impacts	74
4.4. <i>CQ4: Stressors and resistance to stressors</i>	77
4.4.1. Stressors and the salutogenetic idea	77
4.4.2. Sense of coherence (SOC)	78
4.5. <i>Q5: Hearing loss and communication</i>	80
4.5.1. Disability as communication	80
4.5.2. A systems theoretical approach to hearing loss communication	84
<b>Chapter 5. Article 1 Ecological momentary storytelling: Bringing down organizational stress through qualifying work-life stories</b>	<b>88</b>
5.1. <i>Abstract</i>	88
5.2. <i>Introduction</i>	89
5.2.1. Background	89
5.3. <i>Research question</i>	91
5.4. <i>Theoretical foundations</i>	91
5.4.1. Ecological Momentary Assessment.	91
5.4.2. Sense of Coherence	92
5.4.3. Recognition through dialogue	92
5.4.4. EMA as a creator of unifying work-life stories	93
5.5. <i>Method framing</i>	93
5.5.1. Questionnaires.	93
5.5.2. User test.	94
5.6. <i>Conclusions and reflections</i>	98
<b>Chapter 6. Article 2 Er min hovedpine <i>min</i> hovedpine? – om selvmonitorering og reflekser dialoger som led i en sammenhængende og af-individualiserende forebyggelsesstrategi for arbejdsrelateret stress</b>	<b>100</b>
6.1. <i>Abstract</i>	100
6.2. <i>Problemfelt – arbejdsrelateret stress</i>	101
6.2.1. Behandling	101
6.2.2. Forebyggelse	101
6.3. <i>I begyndelsen var ordet...</i>	103
6.3.1. Kvantificering blev til kvalificering	104
6.3.2. Ecological Momentary Assessments	105
6.3.3. Oplevelse af sammenhæng	106
6.3.4. Bevidsthed	107
6.3.5. Dialog	109
6.3.6. Metodens delelementer	109

6.3.7. Fortællinger = fakta?	112
6.4. <i>Foreløbige resultater</i>	113
6.4.1. Persona 1: Hanne	113
6.4.2. Persona 2: Jens	116
6.5. <i>Konklusion på testforløb</i>	118
6.5.1. Selvmonitorering og behandling – same, same eller different?	120
6.5.2. Ecological Momentary Storytelling som forebyggende indsats	120
6.5.3. Ecological Momentary Storytelling som supplement til eksisterende behandlingsformer	120
6.5.4. Ecological Momentary Storytelling i en organisatorisk kontekst	121
<b>Chapter 7. Evaluation of Ecological Momentary Storytelling</b>	<b>125</b>
7.1. <i>Categories describing the method</i>	125
7.1.1. The process of data-collection	126
7.1.2. Data as an indicator for here-and-now experiences	128
7.1.3. Assistive perspectives of the method	128
7.2. <i>Discussion of the method</i>	129
7.3. <i>Perspectives of the method</i>	132
7.4. <i>Conclusion</i>	133
<b>Chapter 8. Article 3: How to Balance Hearing Loss and Work Life – When Individual and Organizational Action Go Hand in Hand</b>	<b>135</b>
8.1. <i>Abstract</i>	135
8.2.	136
8.3. <i>Introduction</i>	136
8.3.1. The multidimensional health perspective	137
8.4. <i>Research question</i>	137
8.5. <i>Contribution</i>	137
8.6. <i>Method</i>	138
8.6.1. Participants	138
8.7. <i>Test design</i>	139
8.7.1. Access to data	141
8.7.2. Shaping the dialogue	141
8.7.3. Inductive study	142
8.7.4. Handling the data	143
8.8. <i>Findings</i>	144
8.8.1. Role and identity: 1. The role of the self in relation to others	146
8.8.2. Role and identity: 2. Self-perception	148
8.8.3. Control: 1. To take control in life	148
8.8.4. Control: 2. The relationship between feelings and control	149

8.8.5. Control: 3. Maintaining control in the presence of other people	150
8.8.6. Control: 4. Strategies as a means to maintain control	151
8.8.7. Control: 5. Dependency on assistive technologies	151
8.8.8. Biopsychosocial contexts: 1. Biopsychosocial contexts related to hearing	152
8.8.9. Biopsychosocial contexts: 2. Biopsychosocial contexts not directly related to the hearing	155
8.8.10. Biopsychosocial contexts: 3. The importance of meaningful activities	156
8.8.11. Biopsychosocial contexts: 4. What provides energy and what causes fatigue	157
8.9. <i>Summing up: Topics for dialogue and discussion within the organization</i>	157
8.10. <i>Discussion</i>	159
8.10.1. Narratives about the self	159
8.10.2. Narratives over needs?	160
8.10.3. The social human being	161
8.10.4. Debt and overachievement	162
8.10.5. The pros and cons of personal assistance	163
8.10.6. Organizational action	164
8.11. <i>Conclusion</i>	168
<b>Chapter 9. Article 4 Hvordan reducerer vi stress hos erhvervsaktive med høretab? - dialogværktøj til at forstå og guide medarbejdere i et stressforløb</b>	<b>170</b>
9.1. <i>Abstract</i>	170
9.2. <i>Indledning</i>	171
9.3. <i>Stress, hørelse og arbejdsliv – hvordan hænger det sammen?</i>	172
9.4. <i>At forstå mennesker – historier fra Castberggård</i>	174
9.5. <i>Forskningsspørgsmål</i>	175
9.6. <i>Undersøgelsesdesign</i>	176
9.7. <i>Stress i en salutogenetisk forståelsesramme</i>	177
9.8. <i>Hørekommunikation i en systemteoretisk forståelsesramme</i>	179
9.8.1. <i>Den vigtige kontekst</i>	181
9.9. <i>Hvordan får vi indsigt i betydningsfulde sammenhænge?</i>	181
9.9.1. <i>Hvordan får vi adgang til den personlige oplevelse?</i>	182
9.10. <i>Hvem var deltagerne?</i>	183
9.11. <i>Hvordan når vi frem til resultater, der kan anvendes i konstruktionen af et dialogværktøj?</i>	183

9.12. <i>Det primære analyseforløb – potentielle stressudlødere</i>	184
9.13. <i>Det sekundære analyseforløb – kontekstuelle og relationelle forhold</i>	188
9.13.1. Rolle og identitet	188
9.13.2. Kontrol	191
9.13.3. Biopsykosociale sammenhænge	192
9.13.4. Opsamling på analysen	194
9.14. <i>Diskussion</i>	195
9.14.1. Dialogværktøj til stressreduktion	197
9.15. <i>Anbefalinger</i>	203
9.15.1. Anbefalinger til HR-konsulenten forud for og i samtalesituationen:	203
▪ Anbefalinger til HR- konsulenten med fokus på at reducere stress:	204
9.16. <i>Konklusion</i>	204
<b>Chapter 10. A quantitative follow up on the qualitative findings</b>	<b>207</b>
10.1. <i>A quantitative counterpart</i>	207
10.1.1. Experience sampling method as data-source	208
10.1.2. The analysis	208
10.2. <i>'Marianne'</i>	209
10.2.1. Summing up – Marianne	222
10.3. <i>'Christian'</i>	222
10.3.1. Summing up – Christian	229
10.4. <i>'Eva'</i>	229
10.4.1. Summing up – Eva	233
10.5. <i>'Thor'</i>	233
10.5.1. Summing up – Thor	239
10.6. <i>'Mona'</i>	240
10.6.1. Summing up—Mona	245
10.7. <i>Conclusion</i>	245
<b>Chapter 11. General discussion</b>	<b>247</b>
11.1. <i>Stress, hearing loss and 'getting around it'...</i>	247
11.1.1. Am I my hearing loss?	248
11.1.2. If you cannot fix it, get around it!	248
11.2. <i>Organisational responsibility</i>	250
11.2.1. The shared potential	250
11.3. <i>When awareness paves the way for control in life</i>	251
11.4. <i>Loosing and gaining control</i>	252
11.4.1. Control, strategies and energy management	253

11.4.2. Sanctuaries and transparency	255
11.5. <i>Strengthening the labour market attachment</i>	256
11.6. <i>e-Health and Ecological Momentary Storytelling</i>	258
11.6.1. Data ownership and privacy	259
11.6.2. Not all people are IT-technicians...	261
11.6.3. Merging research fields	261
<b>Chapter 12. Future perspectives</b>	<b>263</b>
12.1. <i>Data-logging</i>	263
12.2. <i>At a larger scale...</i>	264
12.3. <i>An extended scope?</i>	265
<b>Chapter 13. Conclusion</b>	<b>266</b>
13.1.1. RQ1 – How to gain insight?	266
13.1.2. RQ2 – What are the stressors and how are they dealt with?	268
13.1.3. RQ3 – How to involve the organization?	270
<b>Literature list</b>	<b>272</b>
<b>Appendices</b>	<b>282</b>
Appendix A. Transcripts and notes.....	APP1
Appendix B. Analysis of the dialogues.....	APP99
Appendix C. Participant stories .....	APP131
Appendix D. Material Storytelling.....	APP136

# TABLE OF FIGURES

## Chapter 1

<i>Figure 1-1: My son after his first cochlear implant in 2007.....</i>	<i>28</i>
<i>Figure 1-2: Castberggård.....</i>	<i>29</i>
<i>Table 1-1: How the articles of this thesis correspond to the different parts of the research question.....</i>	<i>37</i>

## Chapter 3

<i>Figure 3-1, Pictures 1-5: Representations of a course participant's experiences during a week of documenting good and bad communication experiences.....</i>	<i>47</i>
<i>Figure 3-2, Pictures 1-3: Examples of good communication from a week of documenting good and bad communication experiences.....</i>	<i>48</i>
<i>Figure 3-3, Pictures 1-2: Examples of bad communication situations from a week of participants documenting good and bad communication experiences.....</i>	<i>49</i>
<i>Figure 3-4: Some of the artefacts used for material storytelling.....</i>	<i>51</i>
<i>Figure 3-5: The sandbox with artefacts.....</i>	<i>52</i>
<i>Figure 3-6: Course participants engaging in the storytelling process.....</i>	<i>53</i>
<i>Figure 3-7, Pictures 1 and 2: Stories from the lives of hearing impaired course participants.....</i>	<i>54</i>
<i>Figure 3-8, Pictures 1-2: The researcher at a distance after initiating the process.....</i>	<i>55</i>
<i>Figure 3-9, Pictures 1-3: Different displays included in the ESM log system, which is a part of the ecological momentary storytelling method.....</i>	<i>58</i>

## Chapter 4

*Figure 4-1: The process of receiving and integrating information in normal hearing and hearing-impaired persons.....68*

*Figure 4-2: The ICF model (WHO, 2001).....73*

*Figure 4-3: Operationalization of the ICF-model through a 'persona'.....75*

## Chapter 5

*Table 5-1: the design of the user test.....94*

*Fig. 5-1. The x-axis illustrates the chronological time and the y-axis illustrates the amount of time between heartbeats (RR Interval). A decreasing variation in the time gap between RR indicates that the body is under some kind of pressure (physical and/or mental).....97*

## Chapter 6

*Figur 6-1. Jordans fire bevidsthedsstadier.....108*

*Figure 6-2, Billede 1-3: Billederne viser skærbilleder af applikationen, hvor aktiviteter og oplevelser kan logges gennem hele dagen. Billede 1 (fra venstre) viser det skærbillede, hvor man kan registrere den aktivitet, man er engageret i, ligesom man kan tilføje tekst. Billede 2 (i midten) viser det skærbillede, hvor man kan logge oplevelsen af energiniveau, antal mennesker i rummet samt humør. Billede 3 (til højre) viser det skærbillede, hvor man kan logge OAS ved at registrere en vurdering af, om man føler sig i balance, har overblik og oplever, at det man laver giver mening.....110*

*Figure 6-3. Online ESM-profil.....111*

*Figure 6-4, Billede 4: HRV-måleudstyret er fra det finske firma Mega Electronics (<http://www.megaemg.com/products/emotion-hrv/>). Elektroderne, der påsættes huden under højre kraveben samt på venstre side af brystkassen, kan klikkes på i de to ender, og udstyret hænger således næsten vægtløst på testdeltagerens bryst, der bærer måleren døgnet rundt.....112*

*Figure 6-5. Kroppens fortælling.....115*

## Chapter 7

*Figure 7-1: Table of categories based on a grounded theory analysis of data from the follow-up dialogues.....128*

*Figure 7-2: Model of factors that influence participants' decisions to drop out or complete the test week and the ideal process; none of the participants experienced this, but it is something to strive for in future iterations of the ESM-design.....131*

## Chapter 8

*Figure 8-1: In the picture on the left, the heart rate variability monitor used for the test is depicted. The picture in the middle shows the data-logging system downloaded onto a mobile phone and the screen where the participants were able to log energy levels, number of people present in the room, and mood at the moment of logging. The picture on the right shows options of taking a picture and recording a short audio file.....142*

*Table 8-2: Table of categories over potential stressors when balancing hearing loss and work life.....147*

*Figure 8-3: Ways of dealing with special needs related to hearing loss within an organization and the potential outcome of different strategies.....170*

## Chapter 9

*Figur 9-1: Vores model af Luhmanns kommunikationsforståelse.....182*

*Tabel 9-2: kategorier fra det primære analyseforløb.....187*

*Figur 9-3: Model over kontekstuelle og relationelle forhold, der kan være afgørende for udviklingen af stress hos erhvervsaktive hørehæmmede.....196*

*Figur 9-4: Dialogværktøj til at arbejde med stressreduktion hos erhvervsaktive med høretab.....203*

## Chapter 10

*Figure 10-1: The ESM log-data as it is displayed in the online profile.....211*

*Figure 10-2: Graphical representation of Marianne's frustration over technical problems with logging momentary experiences as the ESM-system/phone crashes.....213*



<i>Figure 10-3: Flow of experiences.....</i>	<i>214</i>
<i>Figure 10-4: Positive and negative listening conditions during a workday.....</i>	<i>216</i>
<i>Figure 10-5: Positive and negative listening conditions during a weekend.....</i>	<i>217</i>
<i>Figure 10-6: Marianne's reaction to an argument.....</i>	<i>219</i>
<i>Figure 10-7: Energy level (1).....</i>	<i>220</i>
<i>Figure 10-8: Energy level (2).....</i>	<i>220</i>
<i>Figure 10-9: Energy level (3).....</i>	<i>221</i>
<i>Figure 10-10: An ideal social situation.....</i>	<i>222</i>
<i>Figure 10-11: Finding energy through meaningful activities.....</i>	<i>223</i>
<i>Figure 10-12: Peaks of day 1.....</i>	<i>225</i>
<i>Figure 10-13: Christian has taken a photo to recall this moment during the dialogue.....</i>	<i>226</i>
<i>Figure 10-14: A typical workday in Christian's life – 1.....</i>	<i>227</i>
<i>Figure 10-15: A typical workday in Christian's life – 2.....</i>	<i>229</i>
<i>Figure 10-16: A workday without a nap.....</i>	<i>230</i>
<i>Figure 10-17: A workday in Eva's life.....</i>	<i>232</i>
<i>Figure 10-18: Eva's weekly day off.....</i>	<i>233</i>
<i>Figure 10-19: How Eva's values are affected by joining a course.....</i>	<i>234</i>
<i>Figure 10-20: Graphical display of the log-data from Thor's first day of logging.....</i>	<i>236</i>
<i>Figure 10-21: Graphical display of the log-data from a normal workday.....</i>	<i>237</i>
<i>Figure 10-22: Graphical display of the log-data showing Thor engaged in a task, which he experiences as a useless waste of time.....</i>	<i>238</i>
<i>Figure 10-23: Graphical display of the log-data showing a day with a low degree of variation in internal values.....</i>	<i>240</i>
<i>Figure 10-24: Graphical display of the log-data showing a day with a higher degree of variation in internal values.....</i>	<i>241</i>
<i>Figure 10-25: Graphical display of the log-data showing a day with a low degree of variation in internal values.....</i>	<i>242</i>
<i>Figure 10-26: Graphical display of the log-data showing peaks on a workday.....</i>	<i>244</i>
<i>Figure 10-27: A workday in Mona's life—the connection between values.....</i>	<i>245</i>

*Figure 10-28: A weekend-day in Mona's life - the connection between values.....246*

*Figure 10-29: The connection between people in the room and Mona's energy level on a  
workday.....247*

*Figure 10-30: The energy level on a weekend-day where Mona is by herself.....247*

**Chapter 11**

*Figure 11-1: The importance of awareness to stress and feelings of being in control.....255*

*Figure 11-2: Strategy for increased labour market attachment and inclusion.....260*

*Figure 11-3: From data to insight.....263*

# OUTLINE OF THIS THESIS

The thesis is divided into five parts, which all contribute to the scientific field of hearing loss, health, stress and work-life. The aim is to narrow in on everyday stressors in order to reach an understanding of the communicative, contextual and relational matters that may affect health and the development of stress among hearing-impaired employees. The understanding of hearing and health is grounded in a communication perspective as well as a holistic health perspective.

**Part 1.** In this first part of the thesis the area of concern and the real world problem setting are introduced. The Research Question is constructed on the basis of hypotheses and broken down into three parts that correspond with different parts of the thesis and the structure connecting the research question to the four articles is explained. Furthermore the work method and the conceptual framing of the area of concern are described in Part 1.

**Part 2.** In the second part of the thesis the construction, use and perspectives of the method are discussed through two articles:

*Article 1:* “Ecological Momentary Storytelling: Bringing down Organizational Stress through Qualifying Work Life Stories”

*Article 2:* ”Er min hovedpine *min* hovedpine?”

- om selvmonitorering og refleksive dialoger som led i en sammenhængende og af-individualiserende forebyggelsesstrategi for arbejdsrelateret stress”

**Part 2B.** An evaluation of the method, based on a Grounded Theory analysis of participant testing, is described.

**Part 3.** Two articles constitute the third part of the thesis. In the first article the qualitative analysis is presented in order to close in on the contexts that may affect health at a continuum between ‘good’ and ‘bad’ health among hearing impaired

employees in different organizational settings. In the second article the research results are linked to real world practices through the development of organizational tools that can be used actively in the process of preventing and reducing stress among hearing impaired employees.

*Article 3:* “How to balance hearing loss and work-life? - When individual and organizational action goes hand in hand”

*Article 4:* ”Hvordan reducerer vi stress hos erhvervsaktive med høretab? - Dialogværktøj til at forstå og guide medarbejdere i et stressforløb”

**Part 3B.** A quantitative follow up on the qualitative findings is carried out based on log-data from the intervention study.

**Part 4.** In the final part of the thesis the general discussion, the conclusion and the perspectives of this thesis are presented and discussed.

Research questions, conceptual questions and the structure of the thesis, where the connection between the research question and the articles is explained are presented in Chapter 2.

# **PART 1**

# CHAPTER 1. GENERAL INTRODUCTION

Anne, 49 years old: “[When] I go to sleep I lie with open eyes because I have tinnitus, and it bothers me a lot. And so while I am lying with my eyes open ‘the policeman’ arrives, and I’m really good at using him to beat up myself: “Why don’t you do it this or that way?” And then I lie there and make plans and strategies on how I just need to get up and find out how I make everything add up. And so I tell myself that “when you get up, Anne, then you have to make it work. You have to repeat what your colleague says to you in order to be sure to understand what it is she’s telling you. And you need stay in control when a customer asks for a particular item. Then you have to do this and that. Go to the folder and look up whether it can be right, and do this and do that”. So I can get a structure and be sure that I haven’t forgotten anything. And I lie there twisting and turning, and then at some point I get up and go down to watch TV or flip through a magazine or read a book, and then I think: “Now I’m tired, now I’ll go to bed. Then I go back [to bed] and I sleep maybe just a little and then I’m awake again, and then the policeman starts over. And to get rid of all this mess, and to get some rest in my head, I really like to travel. Then there’re no commitments and there’s no work. There’s just space...””

Quotation from a hearing-impaired female participating during a praxis study<sup>1</sup>.

## 1.1. HEARING LOSS: A WIDESPREAD CONDITION AFFECTING LIVES

Just after New Year’s Eve, 2015, I was on a retreat in Jutland to write on my thesis when I met the musician, writer, theoretical physicist, and life philosopher, Peter Bastian. My meeting with him was very inspiring. Indeed, my thoughts often return not just to our conversation but to his whole being and the curiosity, enthusiasm, and reflection he managed to introduce to me. Peter did this within the little half hour that we sat by the same table in the dining area of the refugium. I met him in the middle of what must have been a massive life crisis when just over a month before he had been diagnosed with acute leukaemia.

---

<sup>1</sup> The praxis study was part of a course for unemployed hearing-impaired people at the Castberggård Job and Development Centre, Hedensted, Denmark, autumn 2014. All participant names in this thesis have been altered for privacy reasons.

He did not mention the illness until later on in our conversation. We talked about my research and about hearing. Peter told me that on a trip to Greenland he, for the first time, had become aware that he had tinnitus. He was in a very desolate and quiet area, and he wondered why he was constantly hearing what sounded like a helicopter. After a while, it dawned on him that the sound came from within himself and not from the outside. That was the exact moment when Peter discovered that he had tinnitus. Tinnitus is common to many professional musicians as the sounds from their music may gradually affect the cilia hairs of the inner ear. The point of this story is that hearing problems can occur at any time to anyone and often unexpectedly. Hearing loss and/or tinnitus can constitute a 'keynote' in life and is experienced and discovered differently from individual to individual. The challenges that come with it are diverse and depend on a multitude of varying factors. However, Peter and I did not talk further about his tinnitus, and I do not know how it affects his everyday life.

My meeting with Peter is also relevant for this study for another reason. He represents, in my eyes, the greatest strength a person can possess. This is a strong ability to look inwards and outwards at the same time through a detailed reflection of the contexts that affect each other in life. We talked about stress and the method used in this study, which is based on a biopsychosocial stress understanding. Peter immediately understood why this biopsychosocial approach is essential to understand stressors in everyday life. He related his understanding to his own experiences with the illness as he had discovered an increased feeling of stress in different contexts. Upon these moments of stress he had to reflect and 'listen' to his body in order to be able to navigate through the situations.

Peter recovered from the illness after just over three months. Based on what I have learned in the present study, I believe that his reflective approach to the illness, his determination to understand the effects of different stressors on his general wellbeing, and thus to avoid certain situations, were contributing factors in his quick recovery.

The aim of the present study is to examine the contexts of everyday life among hearing-impaired people in the Danish workforce. In examining the contexts, I will investigate the ability to deal with everyday stressors, which may affect psychosocial health, and subsequently labour market attachment. I will thusly observe communicational, social, individual, physiological, cognitive, and organisational life contexts through holistic glasses based on a salutogenetic and biopsychosocial understanding of stress. In this manner, I aim to reach a qualitative understanding of everyday stressors in the lives of hearing-impaired employees.

The above quotation from 'Anne' provides a peek into the life of a hearing-impaired person. Her story represents similar stories of many others with hearing difficulties across Denmark and across the world, and it covers several of the

important aspects of this thesis. The problems addressed by Anne are stress, communication problems, lack of sleep, self-reproach, and negative patterns that become a part of everyday life affecting her work capacity and her self-perception narrative. These are general problems that many people with hearing loss recognize. Tinnitus is an added but common problem among people with hearing impairments, which in Anne's case is a contributing factor to insomnia. She expresses a myriad of thoughts that both signal anxiety and stress. And the content of her thoughts emphasize work situations. In these she has had anxiety-inducing experiences like misunderstanding information from a colleague and giving a customer a wrong item. She mentions structures and strategies as important tools and the holidays away as necessary breaks. Yet her story is real and far from unusual.

Hearing loss is a widespread condition affecting many people in their everyday lives. The number of people with hearing problems has reached, according to the Danish National Hearing Association, up to 800.000 in Denmark. In addition, about 10 percent of the Danish working population has a hearing impairment ([www.hoereforeningen.dk](http://www.hoereforeningen.dk)). In a Danish study from 2006 on the significance of a hearing impairment on labour market attachment and work life, 2.407 people from the ages of 50 to 64 participated. Of the participants, 13 percent suffered from moderate hearing loss while 27 percent had difficulties following a conversation with more than two people in the room. Moreover, 16 percent experienced everyday problems like challenges with hearing the phone ringing or understanding another person who is speaking (V. T. Christensen, 2006).

## 1.2. MOTIVATIONAL CONTEXTS

My interest in hearing loss arises from several both personal and professional experiences I have had within the past 13 years I have been involved in the field. In order for the reader to understand my stand – and thus the scope of this thesis – it is important to describe the different contexts that have given rise to the project.



### 1.2.1. PERSONAL MOTIVATIONAL CONTEXTS

My involvement in the hearing healthcare field started in 2002 when I gave birth to my deaf son. He is now cochlear implanted<sup>2</sup> and 13 years old. He is still deaf with his CI (cochlear implant) detached and hard of hearing with his CI attached.



*Figure 1-1: My son after his first cochlear implant in 2007*

My son's hearing loss became the starting point of my work within the field, and I soon developed an interest in the mental wellbeing and the communication of the deaf and hard of hearing. In 2005, as a part of my study (cand. IT, Aalborg University), I started focusing on developing assistive technologies within the field of game-based learning to help deaf children and their families communicate. Soon after, I started up the company Vistachild together with a fellow student. We focused on online sign language learning and auditory training of cochlear implanted children through computer games. Despite winning two business plan competitions (<http://www.venturecup.dk/alumni-companies/>) and the implementation of a pre-project with Teknologisk Innovation A/S (today Syddansk Teknologisk Innovation: <http://www.sdti.dk>), Vistachild did not survive more than a couple of years due to a small target group and lack of funding.

---

<sup>2</sup> A cochlear implant involves a number of electrodes implanted in the cochlea that take over the function of the cilia. Audio input activates the electrodes that stimulate the auditory nerve and thus gives the deaf a sense of sound – an aural representation. This, however, should not be confused with the sound of normal hearing. See for example: <http://www.nidcd.nih.gov/health/hearing/pages/coch.aspx> , <http://www.cochlearimplant.dk/Hvad%20er%20CI/index.htm>

My personal experiences form the crucial driving force for my work within this field. These personal experiences could also be labelled the *empirical motivation* deriving from my own life with a hearing-impaired child. But the motivation reaches further than the empirical level because of the future perspectives that are constantly becoming more present as my son grows up. Over time, he will also become a part of the Danish workforce. This brings the project to a *political* level based on scenarios for the future labour market and the hope for political actions that will make the inclusion of hard-of-hearing people in work-related contexts possible.

### 1.2.2. POLITICAL MOTIVATIONAL CONTEXTS

Unfortunately, the combination of praxis and research in this area has not been developed much so far, and social-disability research is, according to a 2011 study from the Danish National Centre for Social Research (Bengtsson & Stigaard, 2011), not as developed nor as coherent in Denmark as in our neighbouring countries: Norway, Sweden, and Great Britain. The main explanation for this in Scandinavia is a much more substantial level of government support that has existed for more than thirty years as well as a closer relationship between practitioners and researchers in both Norway and Sweden. Also, options and support for forums in which social disability research is shared are reduced in Denmark compared to neighbouring countries. In Britain, the research has, in earlier years, been more political and government controlled than in the Nordic countries, but this difference has been reduced in recent years due to mutual influences. Since 2009, when Denmark joined the United Nations' convention on disability rights, Danish disability research has moved its focus from a concern for social support, technical aids, and personal assistance to participation at a more general level. This report reaches the conclusion that more social disability research is needed in Denmark with social policy objectives. Such research must concern the evaluation of methods and the effects of different assistive actions in the social disability area (Bengtsson & Stigaard, 2011). This conclusion played an initial role in the process of establishing the present PhD project as a collaboration between Castberggård Job and Development Centre and Aalborg University. The thesis covers not only social matters but also includes perspectives from the medical, communication, and psychological scenes. Hence, it will glean from a multidimensional understanding of the research field in order to integrate this understanding into both a theoretical and practical frame.

### 1.2.3. PROFESSIONAL MOTIVATIONAL CONTEXTS

Besides the personal and political motivational contexts, I also became professionally motivated as I started working at Castberggård Job and Development Centre in 2008. Here, my main focus in the following years was on hearing impairment and work life. Castberggård ([www.cbg.dk](http://www.cbg.dk)), is located in the heart of Denmark and in the hearts of many deaf and hard-of-hearing Danes. Playing a significant role as the only folk high school and job-and-development centre for the deaf and hard of hearing in Denmark, Castberggård also has a role and a responsibility to reach out to other institutions and to provide stakeholders with information on the real-life situations of the two target groups.



*Figure 1-2: Castberggård, folk high school and job-and-development centre for the deaf and hard of hearing in Denmark - situated in Urlev in the heart of Jutland.*

This is an institution that in many aspects aims to link the knowledge of the practitioners to research-using methods based on a combination of company values, research, and practitioners' experiences. It will thusly develop courses directed at deaf and hard-of-hearing people who are in danger of losing their jobs or who have already lost their jobs.

On the other hand, Castberggård starts up projects that are focused particularly on social, educational, organizational, political, and inclusion-oriented matters. Being a fairly large player in the hearing-disability area in Denmark, it has been natural to consider the role of and the potential for Castberggård in the above discussion. Castberggård mainly has practical insight into contexts that affect labour market attachment, increased sickness-absence, and reasons for hearing-disabled people to grow in danger of losing their jobs. Its management has thusly decided in 2011 to finance this PhD-project in order to obtain a more detailed understanding of the

contexts that influence labour market attachment. The target group was not deaf people who used sign language as their first language but people with a hearing impairment. These individuals are challenged in a different way as they depend on residual hearing to communicate rather than visual communication. As such, the aim was to investigate stressors and the resistance to stressors in order to examine the reasons for increased sickness-based absence and a more fragile labour market attachment in the group. In continuation of this concept, the findings of this thesis were to be integrated into the practical work at Castberggård.

## 1.1. EXPERIENCES FROM CASTBERGGÅRD

In June 2008 I started working as a job and development consultant at Castberggård. I started as a manager of the project ‘Work Life & Hearing’ together with Erik Brodersen, who for more than 25 years has played (and still plays) an important role in both the national and the international scene working with the hearing impaired.

Erik Brodersen is, among other things, the co-author of one of the most important Danish publications in the area of hearing rehabilitation ‘White Paper – The Hearing Impaired in the Centre’ [author’s translation] (Brodersen et al., 1999). White Paper has, since it was published in 1999, led to several political initiatives and changes. One example is the free choice of public or private hearing aid treatment:

*‘The work group recommends a three-year trial period from year 2000 onwards to allow for the hearing-impaired person to either choose to be treated in the public audiological system or receive grants to be treated by private, authorized distributors of hearing aids’* [author’s translation] (Brodersen et al., 1999, p. 4).

As a result of this action, today it is possible to choose whether you want to receive a grant for treatment at a public or private clinic when buying a hearing aid. Also based on the recommendations of the White Paper, the training of audiology assistants in Denmark has increased, which subsequently has increased the competition in the field. Of particular interest to the present study’s focus is the research that has been conducted on the basis of the White Paper’s recommendation no. 2, which declares,

‘The work group has found that in Denmark there is not extensive relevant knowledge of the social and personal consequences of untreated and treated

hearing loss. The work group recommends that the Danish society invests in obtaining real knowledge about these issues. Only with this knowledge it is possible to prioritize efforts in both the medical and audiological offers as well as the educational programs'

[author's translation] (Brodersen et al., 1999, p. 4).

'Work Life & Hearing' was a Castberggård project under The National Labour Market Authority indirectly deriving from the above recommendations. It was initiated on the basis of the results from the Institute of Social Research's report on the hearing impaired in the Danish labour market (Christensen, 2006), which focuses on several of the recommendations in the White Paper described above. The report showed among other things a premature retirement from work among the group of hearing-impaired above the age of 50. The results also showed that an early retreat from the labour market often happens as a result of an untreated hearing loss. This might be the case when, for instance, a case of hearing loss progresses over a longer period of time, the hearing impaired person slowly gets used to poorer hearing, and he/she then creates strategies for coping. The time span between initial suspicions of a hearing loss to the point where hearing aid compensation is effectuated can be very long and even last several years. The main objective of the project "Work-life & Hearing" was therefore to discover unidentified hearing loss in employees in a large Danish organization.

In close cooperation with the municipality of Hedensted, the project became a great success. The initial results from measurements of a group of kindergarten teachers showed a surprisingly large proportion of employees with an emerging noise-related hearing loss. The results immediately attracted the media's attention and reached a political level within a week. We ended up reporting the results at an ongoing basis to the Socialist People's Party (Socialistisk Folkeparti), who were particularly alarmed by the initial results: (<http://www.hoerelse.info/minister-i-samrad-om-dagplejestoj>).

During the project period (2007-2010), we conducted 530 hearing screenings and even more interviews at the municipality of Hedensted. A fifth of the employees (99 persons) were found to have undiscovered and untreated cases of hearing loss requiring treatment while another 185 had minor hearing loss (<http://arbejdslivhoerelse.cbg.dk/AHrapport.pdf>).

In 2009 I became the manager of one of the major flagships at Castberggaard, HHIA (Hearing Impaired at Work). With the support of the Danish Labour Market

Authority, the job and development centre at Castberggaard was initiated in 1992 offering support and training to unemployed deaf people. Shortly after, the service was extended to include the hearing impaired, forming what is today known as HHIA.

Through conversations with a significant number of hearing-impaired persons about the mechanisms that have been instrumental in pushing them out of work, I have become increasingly aware of how important this PhD project is. I have come across people with hearing loss who have become more robust via interactions with others, from sharing stories, and by discussing strategies and communicating with others who have hearing loss. To me, this empirical insight, hands on experience, and understanding through dialogue represents a separate motivational context.

What often struck me in my work with hearing-impaired persons was the coincidence of stories to which I listened. Stories on workplace bullying, extreme fatigue, and burnout, as well as memory and concentration difficulties, especially caught my attention. Furthermore, there was a high percentage of course participants who had experienced being – or were at the time – sick with stress and depression. And my concern about whether these challenges were particularly widespread among the hearing-impaired compared to those with normal hearing was awakened.

## **1.2. AREA OF INTEREST**

The target group of this study is users of hearing technology besides sign language users. This means people with hearing disabilities, who depend on oral and auditory ways of communicating. It is mainly the cognitive and psychosocial challenges related to this group that will be addressed in this project. Hearing loss affects communication and will often require a great amount of energy from the people who are communicating. The intention in this project is to develop an understanding of the communication situation, which people with hearing loss in Danish companies find themselves in, based on an intensive study of each participant's everyday life. Hence, this is primarily a qualitative study.

### **1.2.1. STATE OF THE ART**

This thesis is taking a multidimensional perspective on hearing loss and health and is based on an understanding of hearing loss grounded in communication science and a salutogenetic and holistic understanding of health. Salutogenesis means the

opposite of pathogenesis as the focus is on a health perspective: What makes this person healthy? Rather than focussing on illness, the question is as such: What is the disease and how can we fix it? Research on hearing disability is mainly focused on the medical, psychological, and social research areas. After all, pathological, psychological, and sociological approaches are in line with traditional practitioner and audiologist approaches in the hearing aid fitting and rehabilitation processes. In literature searches,<sup>3</sup> I have come across the medical approach to hearing loss as the most common one, mainly aiming at informing audiologists in audiological clinics. I have been searching for communication science approaches to hearing disability along with models of communication that explain the communication situation of hearing impaired persons. I did so in order to understand the challenges people experience from a communication angle rather than from a pathological or rehabilitation perspective. The searches have only uncovered a number of social communication models in the networks of hearing-impaired persons (Manchaiah & Manchaiah, 2011), communication models for rehabilitation of people with hearing disability building on an ecological understanding of audiology (Borg, Bergkvist, Olsson, Wikström, & Borg, 2008; Borg, 1998), communication models focused on the physical ear, on rehabilitation, on enablement, on hearing technology etc. (Stephens, D., & Kramer, 2010), and linguistic models based on conversation analysis (Egbert & Deppermann, 2012). The search also returned one hit, which took the communication science approach to disability based on systems theory (Michailakis, 2004). I will return to this in the chapter on *Disability as Communication* (Chapter 5.4.1). In Michailakis' description, the author touches upon perceptive disabilities as hearing impairment (Michailakis, 2004), which is useful to some extent. But besides this, I have not been able to find a communication science approach nor a communication model that describe hearing loss from a communication science perspective nor from a systems theoretical angle. Thus, this project contributes a unique communicative framing of the interest area at an international research level.

The salutogenetic and holistic approach in Denmark has in recent years been applied especially within the nursing area (Fredens, Johnsen, & Thybo, 2011). But the salutogenetic health perspective is gaining ground in the health communication field. Explaining and measuring stressors and resistance to stressors among hearing impaired employees on the basis of sense of coherence (SOC), which according to Antonovsky is crucial in creating resistance to stressors (Antonovsky, 2000), has not been done previously according to my literature search on 'hearing AND sense of coherence'. Sense of coherence has been scientifically applied to examine the quality of life among hearing-impaired children (Anmyr, Olsson, Freijd, & Larsson,

---

<sup>3</sup> Searching the databases at Aalborg University Library and adding the search words 'hearing AND communication', 'hearing AND communication model', and 'hearing AND communication science'

2015; Most, 2007) and people with Meniere – an illness that very often also causes hearing loss (Green, Verrall, & Gates, 2007; Söderman, Bergenius, Bagger-Sjöbäck, Tjell, & Langius, 2001; Söderman, Bagger-Sjöbäck, Bergenius, & Langius, 2002).



## CHAPTER 2. RESEARCH QUESTION

A general question frames the area of interest: *How is it possible to reduce labour market stress among persons with hearing loss?*

Based on the introduction to the area of interest a row of hypotheses also arose:

1. It is necessary – and possible – to create a method that gives both a detailed and holistic perspective of the contexts that influence stress-related sickness absence among employees with hearing loss. This must be done in order to properly understand the full picture of stress development among people in the group.
2. Certain everyday stressors affect employees with hearing loss in a negative direction and some in a positive direction. Being able to identify what the stressors are and how they affect the individual is decisive for being able to reduce stress in the group.
3. Organizational involvement in the challenges and possibilities of hearing loss is necessary in order to decrease stress and create preconditions for a strong labour market attachment.

The general question and the hypotheses are specified in the following three research questions, which the thesis examines through different articles:

RQ1: *How can I obtain a holistic perspective of the contexts that influence the labour market attachment in both a positive and negative direction among employees with a hearing loss?*

RQ2: *Also, what are the everyday stressors that potentially increase sickness absence and the risk of developing a fragile labour market attachment among the group— and what determines the individuals' ability to resist these stressors?*

RQ3: *And finally, in extension of this, how is it possible to involve the organisation and not just the individual in a communicative process of reducing stress and increasing labour market attachment among persons with hearing loss?*

In order to make a conceptual framing of the project I have, based on the research question, added five conceptual questions (CQ) of importance. These questions are presented below and will be attended to in chapter 4.

CQ1: What is labour market attachment?

CQ2: What is the relationship between psychosocial health and hearing impairment?

CQ3: What is a holistic perspective?

CQ4: What are stressors and what is the ability to resist stressors?

CQ5: How can we understand communication in connection with hearing impairment?

## 2.1. STRUCTURE OF RQ, ARTICLES AND CONTRIBUTIONS

The articles included in this thesis aim at answering RQ1, RQ2, and RQ3 in the following way:

Article 1: ‘Ecological Momentary Storytelling: Bringing down Organizational Stress through Qualifying Work Life Stories’, aims at answering RQ1: *How can I obtain a holistic perspective of the contexts that influence labour market attachment in both a positive and negative direction among employees with hearing loss?*

Article 2: ‘Er min hovedpine *min* hovedpine? - Om selvmonitorering og reflektive dialoger som led i en sammenhængende og af-individualiserende forebyggelsesstrategi for arbejdsrelateret stress’, aims at answering RQ1 and RQ3: *How can I obtain a holistic perspective of the contexts that influence labour market attachment in both a positive and negative direction among employees with hearing loss? And ... how is it possible to involve the organization and not just the individual in a communicative process of reducing stress and increasing labour market attachment among persons with hearing loss?*

Both Article 3, ‘How to balance hearing loss and work life – When individual and organizational action goes hand in hand’ and Article 4, ‘Hvordan reducerer vi stress hos erhvervsaktive med høretab? – Dialogværktøj til at forstå og guide medarbejdere i et stressforløb’, tempt to unravel RQ2 and RQ3: *...what are the everyday stressors that potentially increase sickness absence and the risk of developing a fragile labour market attachment among the group – and what determines the individuals’ ability to resist these stressors? And ...how is it possible to involve the organization and not just the individual in a communicative process of reducing stress and increasing labour market attachment among persons with hearing loss?*

*Table 1-1: How the articles of this thesis correspond to the different parts of the research question*

	RQ1	RQ2	RQ3
Article 1	X		
Article 2	X		X
Article 3		X	X
Article 4		X	X

This thesis aims thus at contributing to the field at a methodological, theoretical, and practical level:

- *Methodological level:* The development of a method to gain insight into everyday stressors
- *Theoretical level:* To construct new theory on the basis of this insight
- *Practical level:* Based on the new theory, to create methods and tools for use in practical and organizational settings.

Before attending to the conceptual questions (CQ), the work method as well as the praxis studies are presented below, which supported the development of the method for gaining insight into the lives of hearing-impaired employees: *ecological momentary storytelling* (Also see Article 1, chapter 5; Kappelgaard & Lund, 2013).

### **2.1.1. AUTHOR COLLABORATION**

Aalborg University, Department of Communication and Psychology. The order in which author names are listed is alphabetic, and the work put into the two articles is 50 percent each.

Articles 3 and 4 are written in collaboration with my supervisor, Claus A. F. Rosenstand, and the distribution of work is here split differently. I am responsible for, respectively, 90 percent of the text in article 3 and 75 percent of the text in article 4.

## 2.2. RESEARCH DISSERTATION

- In 2011 and 2012, Lisbeth Kappelgaard and I participated in U-CrAc<sup>4</sup> at Aalborg University in order to have the students help conceptualize the ideas we got from the pilot-study:  
<http://ucrac.dk/koncept/stressmaaling/#>  
<http://ucrac.dk/koncept/pauseprogram/>  
<https://www.youtube.com/watch?t=103&v=PfB2txcouh8>.
- In June 2013, Lisbeth Kappelgaard and I were invited to present our paper “*Ecological Momentary Storytelling – Bringing Down Organizational Stress Through Qualifying Work-Life Stories*” at the HCI International 2013: <http://2013.hci.international>.
- In 2013, after a workshop on visual research dissertation at Aalborg University I made a stop motion film on the challenges of hearing-impaired people in the Danish workforce:  
<https://www.youtube.com/watch?v=JKtxqni9Vqg>.
- In the fall 2014, I visited a research group run by Sophia Kramer at the department of Otolaryngology-Head and Neck Surgery, section Audiology, EMGO+ Institute at the VU University Medical Centre in Amsterdam.
- During the PhD period, I have shared activities and thoughts through my tumblr-blog: <http://katjalund.tumblr.com/>.
- I have, during the three years of my PhD-study, taught students at Aalborg University and course participants at Castberggård as well as at The Danish National Hearing Association on subjects like research design, prototyping, communication, and stress related to work and hearing.

---

<sup>4</sup> U-CrAc is a three week workshop where students from Aalborg University and University College cooperate with companies and organizations in creating user-driven innovation and new value to company target groups. The workshop is a part of a Scandinavian project with the scope of developing new methods within user-driven innovation ([www.ucrac.dk](http://www.ucrac.dk)).



## CHAPTER 3. WORK METHOD

In the following chapters I will unveil the work method and the praxis studies that have guided the research practices of this thesis and that developed into the ecological momentary storytelling method (Chapter 5.1, Article 1). Ecological momentary storytelling is the method applied in the intervention study in order to gain insight into everyday life and everyday stressors. But, first of all, I find it important to consider the motivational contexts that have not already been covered in the introduction of the thesis. Based on a constructive design research perspective, Bang et al., (2012) have defined 6 different types of motivational contexts on the basis of 6 PhD theses: *'A practice based/artistically inclined approach, an ethical, political, empirical or technological provoked approach and finally a theoretically informed approach'* (Bang, Krogh, Ludvigsen, & Markussen, 2012, p. 7). The overall motivation for a project consists, according to the authors, of a juxtaposition of at least two motivational contexts. They do not claim to have identified all motivational contexts possible, but I will seek to position the motivational contexts that I identify within the 6 types described above. In the introduction, I have described the initial motivational contexts – retrospectively and presently at a personal, professional/organizational and societal level. The motivational contexts described so far are mainly empirically and politically founded.

### 3.1. HUMANSENSING

A certain juxtaposition of motivational contexts became crucial to the design of the study and the construction of the method: a technological/methodical curiosity combined with an ethical challenge. As I started investigating and describing different possible angles and perspectives on the subject area in correspondence with my supervisor, Claus A. F. Rosenstand, he introduced me to the HumanSensing group, which is an independent knowledge group at Aalborg University. I then came in contact with Morten Aagaard, presently an innovations consultant in psychiatry in North Jutland, and Jonathan Led Larsen, psychologist at Aalborg Psychiatric Hospital. Both men, in 2011, were conducting a pilot study on the triangulation of biosensor data and the use of EMA (ecological momentary assessments) in humanities research. I participated in the test activities, which included wearing a GPS-tracker as well as heart rate variability and galvanic skin response sensors for a week. At the same time, I used my mobile phone to enter a Google Docs link with a short questionnaire logging my mood and activities once an hour. This way of logging experiences is also called the 'experience sampling method', hereafter ESM (Shiffman, Stone, & Hufford, 2008). The purpose of the

pilot test was to investigate how the biosensor data could contribute valuable information to the humanistic research field with a focus on mental health and wellbeing (also read Articles 1 and 2 in this thesis for a more detailed description of the pilot-study).

Participating in this pilot-study proved to be paramount in the shaping of my PhD-study as it generated a technological and methodical curiosity and a hypothesis to go with it: Could I perhaps use the method and the technology used in the pilot study to get a new, detailed picture of potential stressors in the lives of people with hearing loss? An ethical question arose at the same time: How could I, at the same time, make them feel safe about ‘letting me in’ on such a private matter?

### **3.2. CONSTRUCTION OF ECOLOGICAL MOMENTARY STORYTELLING**

The method for investigating everyday stressors of the hearing impaired participants was brought about as an extension of the method used in the HumanSensing pilot experiment. I met Lisbeth Kappelgaard, who also participated in the initial HumanSensing study, just after starting my Ph.D., and we soon realized that we had had similar experiences as participants. Lisbeth was also doing a Ph.D. at that time, focusing on grammar school teachers experiencing stress, and we were both at a stage where we were considering the method for investigating stressors among the two different target groups: teachers and employees with hearing impairment.

We both had a feeling that we should use ecological momentary assessments and long-term measurements in order to reach an understanding of the stressors at an everyday basis and with respect for each individual’s experience. We both had a clear perspective of the method as a qualitative tool to gain insight rather than a method applicable to reach statistical knowledge. But we also had the feeling that knowledge would be lost and that it could become a more frustrating rather than an enlightening process to the participants if we constructed the method the same way as the pilot study: we had to change some parameters in order to overcome some of the frustrations we ourselves had experienced. These frustrations came from the fact that we had no one to talk to about our experiences afterwards, and we did not understand what some of the data from the different data sources meant. Thus, we could not make it applicable in order to change structures in our lives that maybe created destructive rather than constructive patterns. We felt that some of the potential knowledge, which we could have used to gain insight into our own lives, got lost and became ‘wasted data’.

Therefore, a priority was to incorporate a dialogue session in the method at the end of a data-logging period. That way it was possible to take the participants by the hand, look at the data together, reflect on the experiences and the data, and in this way integrate knowledge. The method itself was on one hand meant to be a tool for us as researchers to gain insight into the participants' experiences of stressors and ability to resist them in their everyday lives. On the other hand, it was aimed at increasing the participants' own knowledge of different contexts that could cause experiences of distress or that could help build up resistance to stressors. By supporting the increase in awareness on everyday contexts, our hypothesis was devised so that we could help them make more conscious choices that would support positive development in their everyday lives.

We decided on a method, which was a triangulation of two of the methods we tested in the pilot study plus a follow-up dialogue. In constructing the method, we were inspired by the ESM, which was accessible from a mobile phone, and on heart rate variability measurements, hereafter HRV. This way, we would get access to both the bodily and mental experiences, and we could compare these data in order to reach greater insight at a particular moment. This would then help us understand how different contexts in everyday life are at play and affect each other.

### **3.2.1. A PILE OF DATA IN 'NO TIME'**

Having decided on the three data sources that were to make up the method triangulation, we started working on the design and the content of the ESM. We wanted to design the ESM so that we could log as many data as possible in each entry. At the same time, we wanted to make the entry easily manageable and timesaving as we wanted the participants to log frequently and not just a couple of times a day. In the pilot test, we had to set the alarm once an hour to make an entry. We wanted the same frequency, but we also wanted a design that could prompt the participants automatically.

We knew that we could not programme the system ourselves. Fortunately, we ran into two young developers in 2012 at a university workshop in Aalborg, who had just started up their business, Bunker43 ([www.bunker43.dk](http://www.bunker43.dk)), and who were eager to become a part of the project. We soon started the design and development process in cooperation with them. We knew from the pilot study that it would be a challenge to keep the time it would take to make a data-entry minimal and at the same time get enough information about that particular moment so that a week later we could recall specific moments and experiences related to that moment. We soon decided that it should be an option when making an entry to add extra text, take a photo, and make a short audio recordings. These are all functionalities with the



purpose of ‘throwing an anchor in time’ at moments that the participants would want to remember and return to during the dialogue.

What we needed, in order to be able to develop the system, was also knowledge on which questions we, at a minimum, had to ask in the ESM as we wanted to keep it as short as possible. But before we knew exactly what questions were important to ask at a general and at a target group level with a focus on special challenges, we sat down with the developers to discuss system functionality, ownership of data, and access to it.

### **3.2.2. SYSTEM FUNCTIONALITY**

We knew from the pilot study what we wanted to be able to do with the data: We wanted to have the option of accessing the data at all times during the test week, but we also wanted the participants to be able to do the same. We also wanted to have a data representation that was easy to understand when sitting down with the participants in the dialogue sessions and looking at the data together. At the same time, we did not want the system to analyse the data, but we wanted it to be easy to spot peaks in the data.

The exact technical details of the system development will not be presented in this thesis as the developers were responsible for this part. But the system functionality was important for us to ‘get right’ in order for us to use the data in the manner we imagined – as memory anchors forming the basis for the dialogues and as indicators of the correlation of different contexts.

The ESM ended up being programmed as a mobile application but downloaded beforehand onto a smart phone only for the use of logging experiences. At the same time, data was connected to an online profile for each participant.

### **3.2.3. PRIVACY AND OWNERSHIP**

The online data was accessible with a web address only known to the developers, who would only access it for programming purposes, to us as researchers and to the participants themselves. None of the participants had access to the other participants’ data. As such, a written privacy agreement was made saying that the data belongs to the participants but that we as researchers are allowed to use the data when using aliases and hiding characteristics that may reveal the participants’ identities.

### 3.2.4. CONTENT AND QUESTIONS DERIVING FROM THEORY

Based on a common understanding of health and stressors based on the salutogenetic idea and a multidimensional perspective, Lisbeth Kappelgaard and I soon agreed on including questions that would give us insight into the sense of coherence – the SOC. But the components that make up the SOC: meaningfulness, manageability, and comprehensibility, were not easily translated into the everyday logging of the SOC. We found meaningfulness to be easily transferable as most people are able to assess feelings of – or the lack of – meaningfulness in connection to the activities they engage in. But how do you ask if the situation is comprehensible or manageable? These questions may jeopardize the integrity of the individual. Moreover, there was a risk that we would not get the answers according to actual experience but a less accurate picture. This is because most people are unlikely to admit to not being able to comprehend or manage things in their lives. Therefore, we decided to translate the two components: Manageability was translated into ‘overview’ as having an overview of the situation covers some of the same aspects as manageability. The reason for this was that the participants had to be able to instantly relate the word to the situation they were in at a specific moment. And comprehensibility was translated into ‘balance’ because if one does not understand one’s own reactions, other people’s reactions/actions, etc., it creates a risk of feeling out of balance either within oneself or with others.

Besides the SOC, each of us had theoretical foundations on which we based arguments for questions particularly important to the two target groups. We based our work on the theoretical understandings presented thus far that were grounded on communication and the system’s theoretical perspective along with the salutogenetic perspective. In this manner, I wanted to make a clear division between what was communication and what was ‘noise’ – noise understood in a traditional understanding, meaning sounds that one cannot use as information, and noise understood as meaning poor conditions for communication. I had to split up the noise issue into these two focal points. This created the necessity for asking to what degree did the participants experience noise and also to what degree did they experience communication progressing smoothly or their having problems with communicating due to, for example, communicational, interpersonal, technical, or noise-related hindrances.

### 3.2.5. CONTENT AND QUESTIONS DERIVING FROM PRAXIS

Before and during the period of my thesis, I have on a frequent basis been teaching hearing-impaired persons at Castberggård. My teaching has thusly had a double

intent to both increase knowledge on hearing loss and communication among the participants in the courses but also to increase my own understanding of the target group. I have, in particular, made use of two teaching methods that are both suited for gaining this double output.

### **3.2.5.1 Method 1: ‘Hospital reality from a lying perspective’**

The first method was inspired by a Dutch participatory design project investigating the architecture of a hospital from a lying perspective, which means that the perception and feeling of rooms, light, pipes under the ceiling, the positioning of a table, etc., was noticed and described by the patients in order to better understand hospital reality from a patient’s perspective (Annemans et al., 2012). The patients would, while being admitted to the hospital, use different documentation tools for describing their experience of being hospitalized with a focus on the furnishing and architecture of a hospital. They would make notes, sketch on paper, take photos, and record audio, and a narrative was connected to each drawing or photo so that the iconographic meanings became clear.

When teaching people with impaired hearing at Castberggård near Horsens, I would introduce a similar task for the course participants to perform for a week with a focus on communication experiences. I did so by asking the question, *‘What do you experience as good and bad communication situations?’* During 2012-2013, I had the opportunity on two occasions to engage a small group of 5-6 persons with hearing loss in such activities. The participants were all unemployed men and women struggling to find a way of balancing hearing loss and work life and therefore attending a course at Castberggård led by job and development consultant, Kis Brandt Petersen.

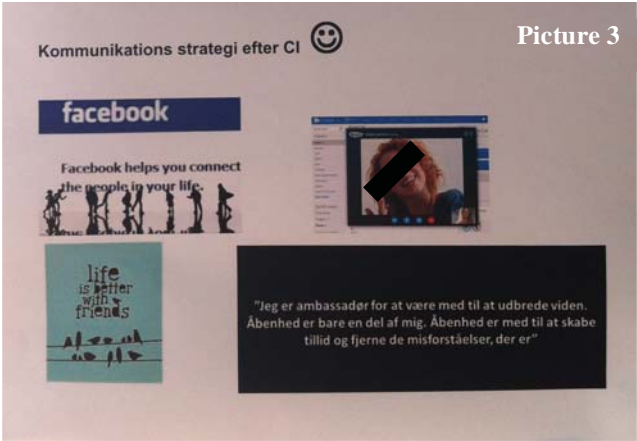
At the beginning of the documentation activity, the course participants were given different tools such as cameras, pens, pencils, paper, and they could use their cell phones for taking photos or recording audio. The following week, when I was teaching again, we would talk about and integrate their experiences in the teaching. This way, we created a foundation for a discussion on the characteristics of good and a bad communication situations and experiences with such.

The participants tended to focus on some of the same topics in their observations, and they inspired each other as to how the documentation could be done, but they seemed to assess the topics in different ways. The pictures below (Figure 3-1) are from a course where the participants ended up making collages of their experiences – some on a higher level of abstraction referring their experiences to more general issues of life with hearing loss, to politics, etc.

In Figure 3-1, Picture 1, a participant has drawn pictures and written notes to illustrate some situations that cause ‘a happy face’: facial contact and no

background noise. Also noted were situations causing migraine: noise and difficult communication situations. The illustrations in Picture 2 express negative experiences with isolation, frustration, fatigue, no communication strategies, feeling foolish, feeling like a parrot repeating what other people say, and in Picture 3, positive experiences with good communication strategies, the importance of friends, technologies like Facebook and Skype that help people connect, and the advantages of being open about the hearing situation. Finally, Pictures 4 and 5 illustrate how a person has chosen to sum up his experiences in a collage, in which he has added words to newspaper articles and magazines to illustrate his situation as a person with challenged hearing. His statements operate at both a personal, societal, and political level and raise subjects like energy usage, law changes, communication, and needs related to having hearing loss.







*Figure 3-1, Pictures 1-5: Representations of a course participant's experiences during a week of documenting good and bad communication experiences.*

Other participants were more pragmatic in their approaches by documenting *signs of* good and bad communication situations. In the following pictures (Figure 3-2), a course participant has done just that by photographing symbols and representations. The first picture in Figure 3-2 is from the class room at Castberggård where a teleloop is installed to improve the sound for people using hearing technologies. The second picture shows the writing interpreter in a classroom situation, and the third shows the teacher, who also has hearing loss, using her FM system to improve the sound from her phone when listening to music. All three photos are examples of assistive technologies that can improve listening and communication conditions.



*Figure 3-2, Pictures 1-3: Examples of good communication from a week of documenting good and bad communication experiences.<sup>5</sup>*

The same participant has also documented challenging communication situations in the lunchroom, Picture 1, Figure 3-3 below, where the acoustics are terrible mainly because of the large glass windows and hard surfaces. The TV-room, Picture 2, is the place where people gather and talk in the evenings. The chattering made while listening to the TV was a challenge to this participant.

<sup>5</sup> Permission to use the photos from the praxis studies in the present thesis was given by all course participants and persons present in the pictures.





*Figure 3-3, Pictures 1-2: Examples of bad communication situations from a week of participants documenting good and bad communication experiences.*

The topics, which the participants focused on, were written down on the blackboard and discussed in the classroom after a week of documenting. The topics that were discussed in both courses are summed up in the following list:

- Other people taking or not taking hearing loss into account in communication situations
- The presence/non-presence and use/non-use of compensational arrangements like assistive technologies, teleloops, and writing interpreters



- Experiences of noise and silence
- Positive and negative feelings caused by good and bad communication situations
- The importance of eye contact and being able to see a face when communicating
- Challenging hearing situations at work
- The importance of sleep and recovery
- Physical pain caused by difficult hearing situations
- Experiences of stress
- Misunderstandings
- Humour
- Fatigue
- Double checking information to make sure there are no misunderstandings
- Feelings of loneliness and frustration
- The importance of having friends
- Openness about hearing loss
- New technologies that facilitate hearing loss communication
- Political decisions affecting the situation of hearing impaired people.

The idea was to support the participants in gaining awareness on how they were affected by different communication situations in their everyday lives. Another goal was for me as a researcher to reach knowledge on how communication is experienced by people with hearing loss in order to be able to create a tool for self-logging. This was focused on not only what may cause stress at a more general level, but also on taking specific hearing loss challenges into account in order to make it easy for the participants in the following intervention to log these if they occurred. It was a challenge to make the participants able to log enough information without extending the logging period, which was why not all topics could be included. Therefore, the questions in the log-system were narrowed down to only a few main categories that could potentially include all of the above and that could be specified through the option of adding text, a photo, or an audio recording.

### **3.2.5.2 Method 2: Material Storytelling**

The second method used for both increasing awareness among the course participants on their own communication situation and gaining insight at a research level was material storytelling developed by Anete Strand at Aalborg University (Strand, 2012). This method was used as a tool for the participants to be able to tell a different story or tell the story of their hearing situation in a different way than what they were used to. The method also supports externalization of difficult subjects or feelings. The method is to let participants gather around a sandbox as they bring a number of artefacts that they pick out among a larger number of artefacts that can symbolize, for example, feelings, life situations, actions, opinions, possibilities, and so on.



Figure 3-4: Some of the artefacts used for material storytelling.<sup>6</sup>

Material storytelling as a method was applied as a part of my teaching on several occasions at Castberggård during 2012 and 2013. The participants were asked to choose a number of artefacts to represent different themes during the sessions. This could be *‘Tell on the basis of the artefacts how you experience life with a hearing loss’* or *‘What would a perfect world look like to you as a hearing impaired person?’* The participants then told their stories. I often experienced people becoming absorbed in the process and forgetting shyness, reluctance, and restraint, and giving in to the process of storytelling.

---

<sup>6</sup> Photo used with permission from photographer Ditte Brøns and the course participants



Figure 3-5: The sandbox with artefacts.<sup>7</sup>

<sup>7</sup> Photo used with permission from photographer Ditte Brøns and the course participants



*Figure 3-6: Course participants engaging in the storytelling process.<sup>8</sup>*

The stories that were told have been heartbreaking, funny, serious, and deep, but most of all very honest and from the heart. Below (Figure 3-7), the first photo on the left tells the story of a woman – ‘the fighter’ – standing next to Donald Duck. This represented the feeling of being the fool everybody laughs at. The big ear is the hindrance that she has to deal with every day that cuts her off from communication, as represented by the cell phone. But she also feels that she has a small tiger inside, which goes in front and clears the way for her to make sure she gets through all of the hindrances every day.

The second photo on the right tells another story of a woman who feels like she is Cinderella isolated from the world behind a wall of mirrors, which forces her to face herself and her hearing challenges every single day. The small book represents her quiet, lonely life, and the car represents the world driving by outside. The turtle was placed there by one of the other participants who felt she wanted to add an observation to the story. The other participant considered the turtle a symbol of

---

<sup>8</sup> Photo used with permission from photographer Ditte Brøns and the course participants

calm and wit, which she felt that the other woman possessed and passed on to the people around her.

Picture 1



Picture 2

*Figure 3-7, Pictures 1 and 2: Stories from the lives of hearing impaired course participants.*



I, as a teacher and researcher, stayed at a distance from the process, not saying anything from the time when the focus of the session was set and the question to be dealt with made clear until all participants had found their artefacts and told their stories (see Figure 3-8, Pictures 1 and 2).



*Figure 3-8, Pictures 1-2: The researcher at a distance after initiating the process.<sup>9</sup>*

The material storytelling sessions were not recorded but only observed, and notes were taken during each session. Only once in late 2014 was a session recorded – this was after the construction of the log-system (see Appendix D. Material Storytelling), and it is therefore only used to emphasize different points in this thesis. Some of the topics that reoccurred throughout the different material storytelling sessions were as follows:

- Isolation + loneliness
- Insomnia
- Hope + loss of hope
- Fatigue + energy usage

---

<sup>9</sup> Photo used with permission from photographer Ditte Brøns and the course participants

- Communication strategies
- Feelings (frustration, feeling like a fool, happiness)
- Inner strength
- Social life
- Openness about hearing loss
- Recognizing how other people's behaviours and actions can affect the individual in positive and negative ways
- Thoughts and dreams of the future
- Noise
- Technical aids.

Several of the topics reoccurred in both praxis studies. Besides the questions related to the overall sense of coherence (see Figure 3-9, Picture 3), which were aimed at evaluating the general stress-level independent of the hearing loss, a number of questions related to everyday life with hearing loss were added. These were, to a large extent, derived from the praxis studies where, for example, topics like positive and negative feelings, levels of energy, noise, loneliness, how others affect the communication situation, and the presence of technical aids to improve sound stood out as important. At the same time, some of these topics also related to a group of schoolteachers, which was the target group for Lisbeth Kappelgaard's research. The content ended up being almost the same for the two target groups. I decided, on the basis of the praxis studies and my previous experiences with the group, to add two more entries. I found these to be of great importance in order to gain a full picture of the situation that the hearing-impaired participants were in. The two extra entries were *noise level* and *communication flow*. The communication flow was meant to be a subjective evaluation of the momentary flow of communication, which could depend on an array of parameters like other people's ability to make communication clear, the presence of technical aids to ease communication, etc.

### 3.2.6. DESIGNING THE ESM

We already covered the content deriving from theory on in chapter 3.2.4. To quickly sum it up the sense of coherence – the SOC – had to be added as questions on the here-and-now experiences of inner *balance*, *overview*, and *meaningfulness*. This would be done in order to evaluate the overall ability to handle stressors at the moment of logging.

As momentary experiences are influenced by the situations people find themselves in, we decided that the first question of the ESM log-system should set the stage for the momentary assessment. The participants were therefore initially asked to choose the type of activity they were engaged in with the option of selecting either *active*

*work, sedentary work, leisure time, socializing, eating, or doing sports* and adding text (see Figure 3-9, Picture 1).

Based on the praxis studies and on a discussion of the different parameters that could tell us something about stress in the two target groups, we decided to also add *mood, number of people in the room, and energy level* (see Figure 3-9, Picture 2). Still, the praxis studies above suggested that this was insufficient in order to track the experiences of hearing-impaired persons considering the challenges related to hearing loss. Therefore, I decided to add two more log options: *noise level* and *flow of communication*. The ESM-logging aimed at employees with hearing loss thus ended up providing data on the following parameters:

*Experiences and cognition:*

- Activity
- Energy level
- Number of people in the room
- Mood
- Noise level
- Flow of communication

*SOC:*

- Balance
- Overview
- Meaningfulness



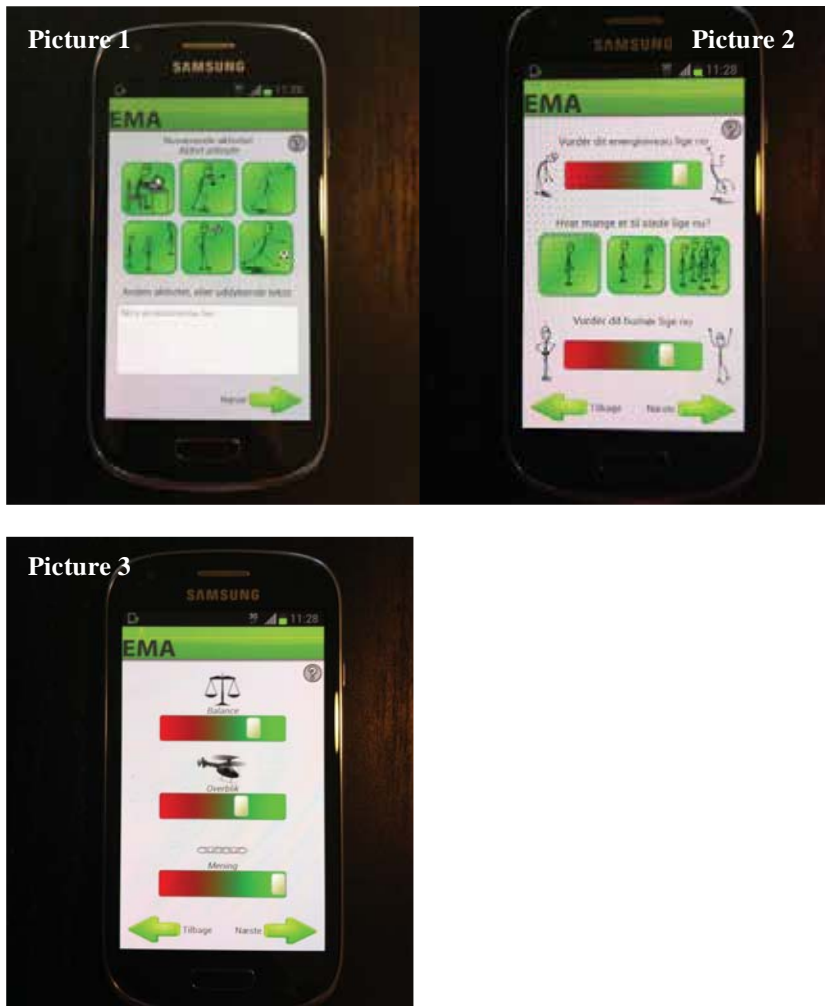


Figure 3-9, Pictures 1-3: Different displays included in the ESM log system, which is a part of the ecological momentary storytelling method.

For every data entry, the participants were able to add information by adding text, taking a photo, and/or recording 10 seconds of audio. Besides information on the above parameters, which the participants in the test week had to actively log, the system in extension automatically logged information on *date*, *time of day*, and *location* to further support the memory in the following dialogue situation. It was possible to enter values on a scale from 0-9 but on a slider with no numbers visible

where the positive end of the slider was green and the negative end of the slider was red.

### **3.2.7. METHODOLOGICAL CONSIDERATIONS**

Several times during the Ph.D. period, I have been unsure of how to interpret the massive data logged both with the ESM and the HRV measurements. The tendency in society today is that ‘big data’, which is how the long-term measurements may be considered, is used for obtaining knowledge on tendencies, patterns, and habits of consumers; citizens; or even of oneself for political, mercantile, or personal gain. The aim of this study is not statistically founded, though it may be perceived as a partially quantitative study. Moreover, the purpose of collecting quantitative data is not to provide the participants with ‘the answer to everything’ but to discover peaks and deviations in the data so that they can reach a sense of understanding through increased reflection on how different contexts in their lives affect each other in negative or positive directions. But the data from the ESM can also be used to test findings from the analysis of the dialogue sessions and this way validate or reject the findings based on a larger amount of quantifiable data.

## **3.3. GROUNDED THEORY**

The ecological momentary storytelling method consists of HRV measurements and momentary data logging – the ESM (experience sampling method). A third and very important part of the method was the follow-up dialogue with the participants in which reflections on everyday contexts on the basis of both memory and data were encouraged. In order to reach an understanding of the multiple contexts that affect momentary experiences throughout a day, I decided to run the transcribed dialogues through what is called classical grounded theory, which was first developed in 1967 (Glaser & Strauss, 1967). This inductive approach to data was originally developed to counterbalance the deductive and positivist sociological method of validation and verification of existing theories, which in several cases proved insufficient when attempting to describe what was really going on in a certain sociological context (Glaser & Strauss, 1967). The reason for choosing grounded theory grew out of a practical problem, which occurred after only a couple of weeks of testing. Initially, I thought that as a researcher I should come up with a quantitatively based analysis of the data collected over the test week, which I then could present to the participants during the follow-up dialogue in order to encourage and increase reflections. But the analyses that I brought to the dialogue sessions soon proved to have the opposite effect since the participants seemed to

perceive the analysis as the truth in a certain way. This truth supposedly explained almost everything they had experienced during the test week and left only little space for deep reflection and wonder. Consequently, I soon returned to a more phenomenological and wonder-based dialogue in line with the initial idea described in the user-test (Chapter 5.1, Article 1) as *'unpredictable, risky and exploratory conversations where truth is not predetermined but where recognition is produced in the interpersonal contact'* (Kappelgaard & Lund, 2013, p. 576). I found that a classical grounded theory approach could help me maintain this curious and exploratory attitude throughout the dialogues and at the same time support an analysis of the participants' reflections rather than of the quantitative data. This would let the reflections and not the numbers guide emerging theories. The dialogues were thus not kept within a strict frame but branched out into reflections on general life contexts as well as detailed stories that revealed how feelings and thoughts were combined and connected to different situations they found themselves in during the test week. And at the same time, the method also gave room for framing certain feelings and thoughts in the present based on stories from the past.

The analysis of the transcribed dialogues happened through three levels of coding: open coding, selective coding, and theoretical coding (Glaser & Strauss, 1967). In the process of open coding, detailed reflections from the dialogues as well as different topics that were touched upon were divided into a large number of different subcategories. In the second coding process, the categories were merged into more superior categories, and at the same time, notes were taken on how the different categories appeared to be connected (see Appendix B. Analysis of the dialogues). All categories were subsequently examined through citations from the dialogues in order to understand the nature of the contexts better. This was also done to reach a conceptual understanding of the correlations that merged into theories and models describing the challenges and possibilities of combining hearing loss and work life (see Chapter 6, Articles 3 and 4).

## CHAPTER 4. CONCEPTUAL FRAMEWORK

The following chapter is based on the conceptual questions also presented in chapter 2.

*Conceptual questions:*

CQ1: What is labour market attachment?

CQ2: What is the relationship between psychosocial health and hearing impairment?

CQ3: What is a holistic perspective?

CQ4: What are stressors and what is the ability to resist stressors?

CQ5: How can we understand communication in connection with hearing impairment?

The conceptual questions have branched off the research question(s):

*RQ1: How can I obtain a holistic perspective of the contexts that influence the labour market attachment in both a positive and negative direction among employees with a hearing loss?*

*RQ2: Also, what are the everyday stressors that potentially increase sickness absence and the risk of developing a fragile labour market attachment among the group— and what determines the individuals' ability to resist these stressors?*

*RQ3: And finally, in extension of this, how is it possible to involve the organisation and not just the individual in a communicative process of reducing stress and increasing labour market attachment among persons with hearing loss?*

Thus the conceptual questions attended to in the following chapters form the conceptual framework of the thesis and the interest area is to be considered in the light of this.

## 4.1. CQ1: LABOUR MARKET ATTACHMENT

Labour market attachment can, according to Christensen, 2006, be defined by a two-tier risk parameter, which first involves the risk of unemployment and second the risk of early retirement (Christensen, 2006). Labour market attachment is influenced by different factors like the relationship with management and colleagues, bullying, stress, sense of coherence, etc. In this thesis, these different factors are investigated in order to reach an understanding of how labour market attachment is affected and what factors influence this.

### 4.1.1. FLEXIBILITY AND ROUTINE

An overall problem in connection with modern work life today is stress as a result of the ‘hyper-complexity’ of society (Qvortrup, 2000). The challenges of a more complex world demand flexibility and adaptability rather than rectitude and diligence from employees of contemporary world companies. Work is broken into smaller parts and projects, which are operated and dealt with by specialized units, consultants, and external freelancers. For one, this trend provides a great deal of freedom to the individual, but at the same time, the responsibility to manage complexity has moved from the management level to the employee level (Qvortrup, 2000).

In his book *The Corrosion of Character*, Richard Sennett describes the life of the janitor Enrico in a linear narrative. The story progresses as Enrico carries out his daily work routines and pays his bills ‘*repair by repair, interest payment by interest payment*’ (Sennett, 1998, p. 16). This description manifests the original meaning of career as a ‘*lifelong channel of one’s economic pursuits*’ (Sennett, 1998, p. 9). Enrico’s son, Rico, on the other hand, represents the ‘new capitalism’ as he and his wife through 14 years after graduating have moved four times to pursue career opportunities and Rico, being a technical engineer, adviser and a consultant, ‘*has no fixed role that allows him to say to others, “This is what I do, this is what I am responsible for”*’. The uncertainty has developed a fear in him of losing control: ‘*He feared that the actions he needs to take and the way he has to live in order to survive in the modern economy have set his emotional, inner life a drift*’ (Sennett, 1998, p. 20). The point Sennett is making is that modern labour is characterized by short-term commitments and weak but numerous and constantly changing network ties. This affects the informal trust between colleagues, which will not be given the time to strengthen properly as strong ties depend on long-term commitments (Sennett, 1998).

Sennett further discusses the concept of routine and claims that '*Modern society is in revolt against the routine*' (Sennett, 1998, p. 32). He argues that two different perceptions of routine have developed since the beginning of industrial capitalism in the middle of the eighteenth century: A perception, which represents the inherent dignity of routine labour offering control and calm to people through mastering rhythms and routines of a particular operation in a work process characterized by equality and fraternity.<sup>10</sup> And there is a perception in which routine work is considered to deaden the spirit (Sennett, 1998) as '*...once established a routine doesn't permit much in the way of personal history; to develop one's character, one has to break out of routine*'<sup>11</sup> (Sennett, 1998, p. 38).

Today, routine work is mainly coloured by this second perception and is generally not considered a personal achievement (Sennett, 1998), but at the same time, Enrico manages to turn a life characterized by routines into a positive narrative. His son rejects the life of his father, which is controlled by routines, yet his own life is falling apart; he is wealthy, but he does not have time for his family, and uncertainty is dominating his life in which he lacks control and inner calm (Sennett, 1998).

What Sennett describes is disturbing as work life today continues in the direction of fractions of expertise and continuous professional development through constant training – often in order to expand the CV rather than to specialize in one professional area. Employers can thus expect their employees to cover more diverse areas of expertise and more work areas within the same time frame. This development leads to an often shallow and constantly fluctuating performance, leaving the person unsatisfied with the work done, as there is no time for immersion or depth. At the same time, employees of today often work several jobs between which they have to switch and adjust.

It is not only the degree of complexity that is a problem in modern work life. In addition, responsibility for one's own work life is increasingly placed on employees. Communication in organizations has, in recent years, turned towards coaching employees in order for them to find the solutions themselves to problems, challenges, and barriers they face in their work lives. Criticism is thusly directed towards the individual rather than towards company management.

---

<sup>10</sup> This point of view was among others shared by the french philosopher, art critic and writer, Denis Diderot, and the french writer, historian and philosopher, Voltaire (Sennett, 1998).

<sup>11</sup> This perception was first described by the Scottish economist and philosopher, Adam Smith, and later by the German sociologist, economist and philosopher, Karl Marx (Sennett, 1998).

#### 4.1.2. VOICING CRITICISM

Svend Brinkmann, professor of general psychology and qualitative methods at Aalborg University in Denmark, and Rasmus Willig, sociologist and researcher at Roskilde University, both discuss how work life is dominated by the use of appreciative management in order to avoid focus on problem areas and thus dismantle critique. Brinkmann in particular discusses the organizational focus on successful stories as more legitimate than the verbalization of problems among employees. He also addresses the use of positive psychology in management methods, which makes it impossible for the employees to voice problems and keep up stoic insistence. He argues for a more stoic attitude towards (work) life in which people stop guiding their actions according to what 'feels right' to them. Brinkmann believes that this will cause employees to act in a manner which is less selfish and more in line with the common good. Such an outlook would facilitate the development of more ethical (rather than selfish) actions that will make us feel more satisfied with ourselves perhaps not in the short run but probably in the long run (Brinkmann, 2014).

Allowing employees to stop scrutinizing themselves and stop searching for the solution to problems merely within themselves might open up a Pandora's Box of criticism towards management to take the place regarding the introspection of employees. Willig focuses on the employees' options of voicing this criticism within the organization. He argues that only positive/constructive criticism is accepted while negative criticism is perceived as complaining. He describes this development as characterizing not only work life but also society in general, and he points out in particular three areas in which this trend is manifesting itself: 'coaching', 'annual performance and development interviews', and 'fitness'. He argues that these three areas, which are common in modern work life, support a sharpened focus on failure so that the risk of 'falling through' increases (Politiken, 2013; Willig, 2009; Willig, 2013).

One could imagine that these modern work life tendencies are particularly challenging if the ability to communicate is decreased due to hearing loss. Employees today have to be able to accommodate themselves to new routines at all times since nothing is static. This creates options for personal and professional development. But if we for a moment return to the initial citation from 'Anne', a person with a hearing loss may not want change if a routine has become integrated and work processes have become familiar. This subject will be dealt with again in the final chapter of this thesis in which conclusions and perspectives are discussed.

## 4.2. CQ2: PSYCHOSOCIAL HEALTH AND HEARING LOSS

Hearing loss affects life in many ways, and the reasons for a fragile labour market attachment and poorer social ties are often also related to general psychosocial health issues. Several studies show a connection between hearing loss and psychosocial health factors. Loneliness is one of these factors (Pronk et al., 2014) as well as stress, somatic health, and quality of life. The risk of acquiring hearing loss increases with age, and cognitive processing ability declines with the ability to hear speech in noise (Moore et al., 2014). Speech perception is affected by the relationship between the signal (the speech) and the noise in a listening situation. This relationship is called the signal-to-noise ratio (SNR) and is measured in decibels (dB). The louder the signal is compared to the noise, the better the speech perception. But a person with hearing loss needs an increased signal-to-noise ratio compared to a normally hearing person in the same listening situation in order to understand speech.

### 4.2.1. PSYCHOSOCIAL HEALTH

Nachtegaal et al. (Nachtegaal, Smit, et al., 2009) did a study on the association between hearing status and psychosocial health in adults aged between 18 and 70 years. Initially, the authors present an overview of 17 previous studies on the correlation between hearing and psychosocial health focusing on different aspects of psychosocial health: depression, health related quality of life, social functioning, mental health, anxiety, somatization, distress, post-traumatic stress symptoms, loneliness, self-efficacy, social anxiety, social network size, overall functioning, self-esteem, well-being, social isolation, and emotional reactions.

The 17 previous studies showed varying degrees of adverse correlations between hearing status and the above focal points, which can all play an important role in the experience of ‘fitting in’ with colleagues and management at a workplace. The authors also emphasize the focus of these studies on elderly people and thus the lack of knowledge about the psychosocial consequences of hearing loss among younger adults. In the study, a focus on the younger population showed that the youngest group of participants (18-30 yrs.) with decreased hearing seemed to experience a higher degree of loneliness. The participants aged 30-39 yrs. showed a higher degree of distress and somatization, while the group aged 40-49 yrs. was connected to experiences of distress, self-efficacy, depression, and anxiety. Finally, the group aged 50-59 yrs. was related to a higher degree of somatization (Nachtegaal, Smit, et al., 2009).

In 2008 in Örebro, Sweden, a large study of 15- to 16-year-old adolescents in



mainstream schools showed that students with both hearing disability and tinnitus were at risk of experiencing mental health symptoms like anxiety and irritation and had a higher degree of substance use such as drug and alcohol consumption. They also disliked school more and experienced being bullied by students (33% experienced this during the recent term) and offended by adults (40%) in school more than twice as often as children with no hearing loss or tinnitus (Brunnberg, Lindén-Boström, & Berglund, 2008).

Several studies have examined the relationship between hearing ability and depression. Almost all of the 17 studies in the overview of studies on the association between hearing ability and psychosocial health presented by Nachtegaal, Smit, et al. (2009) touch upon the issue of depression. The results show a clear correlation with hearing loss. The authors of the 2009 study also determined a correlation between people younger than 70 with a hearing disability and psychosocial health and data from the National Longitudinal Study on Hearing (NL-SH). This research determined that the odds for developing moderate or severe depression increased by 5% with every decibel signal-to-noise ratio reduction of hearing ability (Nachtegaal, Smit, et al., 2009).

#### **4.2.2. HEALTH AT WORK**

In a Dutch study from 2006, Kramer et al. (Kramer et al., 2006) compare sick leave amongst a group of people with hearing disability (150 persons) with a group of normally hearing people (60 persons) over 12 months. The number of people who reported to be sick turned out to be significantly higher in the group of people with a hearing disability (77%) than in the group of normally hearing persons (55%). The results also showed that the difference between the two groups was due to stress-related conditions among people with hearing loss. Further investigation revealed that the ability to identify and differentiate between sounds was a key factor in the group of hearing impaired and was decisive in relation to their experience of exhaustion and stress (Kramer et al., 2006).

Studies from the Danish National Institute of Social Research (V. T. Christensen, 2006; Clausen, 2003) show poorer social ties and less support from management and colleagues at work. Persons with a hearing disability also tend to be more uncertain about work tasks than their normally hearing colleagues; they feel lonelier at work, and they feel more mentally exhausted after a workday. These studies also indicate among the hearing impaired a tendency to work fewer hours, earlier withdrawal from the labour market, a lower employment rate, and lower income. The reasons for earlier retirement seemed to be caused by a higher degree of “push

factors” rather than ‘pull factors’ among the hearing-impaired group of employees<sup>12</sup> (Clausen, 2003). This means that persons with hearing loss to a larger extent feel forced to leave the labour market – they are pushed out – while persons with normal hearing mostly are affected by conditions outside the labour market, which pull them in that direction – leaving the labour market as a choice rather than a necessity.

#### 4.2.3. THE NEED FOR RECOVERY

Several studies have found a correlation between fatigue and hearing loss. Among these are some of the above mentioned Danish and Dutch studies (V. T. Christensen, 2006; Clausen, 2003; Nachtegaal, Kuik, et al., 2009; Nachtegaal, Smit, et al., 2009). According to the studies, there is a clear connection between functional hearing, fatigue, and need for recovery. Nachtegaal, Kuik, et al. find in their study on *Hearing Ability, Need for Recovery After Work, and Psychosocial Work Characteristics* that the need for recovery increases with the severity of the hearing loss, and the need for recovery after work was found to increase by 9% for every decibel signal-to-noise ratio reduction of hearing ability (Nachtegaal, Kuik, et al., 2009). Furthermore, the need for recovery plays a significant role in the risk and duration of sick leave (De Croon et al., 2003; Sluiter et al., 2003).

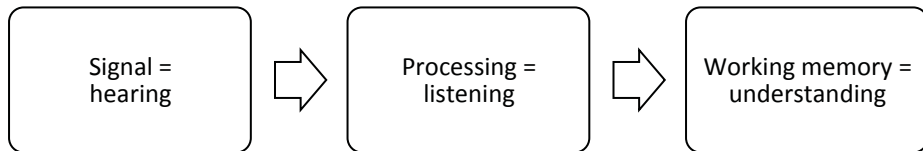
#### 4.2.4. MEMORY

One could say that understanding (language comprehension, reasoning, learning, storage of information) is where hearing (signal) meets the brain (processing). If one cannot hear the full spectrum of detailed sounds that constitute speech, one will find it difficult to process and store information. One could also say that in between understanding and hearing is listening. Hearing is the automatic process of auditory perception – the signal enters the ear parallel to other processes, and hearing is a constantly active process, which happens at a parallel level to other tasks a person is involved in (Horowitz, 2012). The process of hearing is a bottom-up process as it is purely signal based. Listening, on the other hand, is the active process of a person *making an effort* to understand. This procedure of listening is a combination of a bottom-up (signal-based) and top-down (context- and knowledge-based) processing. When the input signal is poor due to a hearing loss, the listening relies to a larger extent on the top-down processing (Lunner, Rudner, & Rönnerberg, 2009).

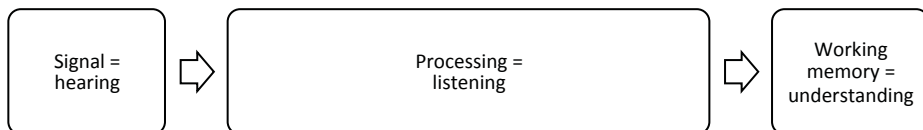
Understanding is the output of the listening process. It is the transformation of hearing and listening (with the support of contexts, experiences, and memory) into something meaningful that can be used to continue and develop communication between people. A growing body of research has demonstrated that if the auditory signal is degraded, the effort of listening happens at the expense of other cognitive processes such as working memory (Rabbitt, 1968; Tun, McCoy, and Wingfield, 2009). Working memory is comparable to understanding as working memory is in control of the temporary storage of information, language comprehension, reasoning, and learning (Baddeley, 1992). Working memory is under pressure when the auditory signal is reduced since the process of listening (the combination of bottom-up and top-down processing) is more demanding than when the auditory signal is clear (the bottom-up process becomes more dominant as the listening effort becomes less problematic). When hearing (signal) is reduced, the effort of listening (processing) henceforth increases along with the pressure that is put on the human system.

In Figure 4-1, the first process describes an estimation of normal hearing where an equal amount of effort and energy is put into each part of the process of receiving and integrating information. The second process is a visual representation of the reduced signal, the increased processing effort, and the subsequent pressure on the working memory in a hearing-impaired person.

### 1. Normal hearing:



### 2. Hearing impairment:



*Figure 4-1: The process of receiving and integrating information in normal hearing and hearing-impaired persons.*

The model (Figure 4-1) can be perceived as a way of understanding the integration of meaning in auditory communication based on a cognitive perception perspective (Lunner et al., 2009), which includes the concepts of bottom-up and top-down processing.

An increasing amount of research is currently addressing the connection between hearing loss and dementia. The results of recent years show that hearing impairment is associated with accelerated cognitive decline in elderly people (Lin et al., 2013) as well as an increased risk of developing dementia (Lin et al., 2011). Changes in brain structure have been observed in connection with reduced hearing and reduced stimulation from impaired cochlea (Lin et al., 2014; Peelle et al., 2011). Moreover, the areas of the brain that are affected are involved in early stages of mild cognitive impairment and early Alzheimer's disease and are important for both spoken language processing as well as semantic memory and sensory integration (Lin & Albert, 2014).

The question of how hearing loss might contribute to dementia is still somewhat uncertain. According to an article in the AARP (American Association of Retired Persons) online bulletin, in which Frank Lin, an otologist and epidemiologist at Johns Hopkins University in Baltimore and Albert Wingfield, professor of neuroscience at Brandeis University, are interviewed, it seems that two (contradictory) factors play a leading role:

1. The cognitive load of straining the system and thus stressing the brain: *'If you put in a lot of effort just to comprehend what you're hearing, it takes resources that would otherwise be available for encoding [what you hear] in memory'* (Arthur Wingfield, <http://www.aarp.org/health/brain-health/info-07-2013/hearing-loss-linked-to-dementia.html>).
2. And the lack of stimuli due to reduced auditive signals and social isolation: *"Certain structures of brain cells can shrink when they don't get enough stimulation"* (Arthur Wingfield, <http://www.aarp.org/health/brain-health/info-07-2013/hearing-loss-linked-to-dementia.html>).

Wingfield also addresses the hypothesis of improving cognitive function by improving hearing. A recent study significantly confirms this hypothesis. Patients aged 65 to 85 years with profound, post-lingual hearing loss had their auditory function and hearing communication improved through cochlear implants. The results showed improvements in speech perception, cognitive abilities, quality of life, and social participation between ½ year and one year after the implants were done (Mosnier et al., 2015).

### 4.3. CQ3: A HOLISTIC PERSPECTIVE

The project's basic assumption is that communication science and a wide holistic perspective on life circumstances can contribute to the understanding of the situation people with hearing loss experience.

The holistic perspective is a basic premise of this thesis and is being used in order to reach an understanding of the nuances that come into play and interact in the lives of hearing-impaired employees. The holistic and the systems-theoretical perspectives may be considered two sides of the same coin in this context. This is because the holistic perspective indicates that a system should be considered as a whole. It cannot be understood merely as a functioning of the parts alone. If a whole is broken into its smallest parts, the parts will inevitably be altered as they lose some of their functioning when losing contact with the other parts.

In 1807, the German philosopher Hegel had already given a wonderful description of holism understood in a biological context:

The bud disappears when the blossom breaks through, and we might say that the former is refuted by the latter; in the same way when the fruit comes, the blossom may be explained to be a false form of the plant's existence, for the fruit appears as its true nature in place of the blossom. The ceaseless activity of their own inherent nature makes these stages moments of organic unity, where they not merely do not contradict one another, but where one is as necessary as the other; and constitutes thereby the life of the whole.

(Hegel, 2010, pp. 12-13)

The essence of this citation is that the parts of the unit (system) may seem separate and contradictory, but their nature turns them into an organic unity. As such, they depend on each other – the *dependency* being the crucial function for the vitality of the system. This perception of holism will permeate this thesis as a truth that dominates the overall understanding of the interest area. The holistic perspective needs, for example, to be added in order to be able to explain a stressful situation as the body can react in different ways to stress: the heart may start pounding, thoughts may run wild, mood may be affected, etc. But also, we seek to understand the different types of stress as well as the contexts that may lead to stress over time.

In order to obtain a preliminary understanding of the target group, the initial approach involved desk research. My focus was on the perspectives that seem to dominate the hearing disability area: the medical, the sociological, and the psychological perspectives that draw on international knowledge on disability in more general terms. The hearing-rehabilitation field in Denmark constitutes a combination of the medical and the psychological perspectives, and patients are often referred to local government communication centres around the country. Here, professionals with different backgrounds and areas of expertise support the person in rehabilitation. In this thesis, I will argue that understanding communication in a disability context is necessary in order to reach a full understanding of hearing loss challenges. One could say that medical matters like a defective ear can lead to communicational challenges in sociological contexts, which then can lead to psychological problems. Communication is hence the glue that combines the medical, the sociological and the psychological areas by offering an explanation of how a physical problem can cause social and psychological problems. The challenges of hearing loss are only really understood once one truly grasps the communication situation, reflects on it, and dissects it. I therefore believe that a study based on the science of communication will be able to tie the pieces together in order to understand, first of all, what the stressors of everyday life are, and secondly, how they affect the individual on an everyday basis. This way, patterns and correlations are emphasized through communication, and a connection to the medical, the sociological, and the psychological aspects of hearing loss can be made.

#### **4.3.1. UNDERSTANDING FUNCTIONING, DISABILITY, AND HEALTH**

Let us turn to a generally accepted understanding of disability in order to comprehend the field investigated in this study. In 2001, the ICF (International Classification of Functioning, Disability, and Health) framework was approved for use by the World Health Assembly. It was established as a multipurpose classification system in understanding health and health-related states, health conditions, and contextual/environmental factors as determinants for a person's disability and functioning. In other words, it is the WHO framework for measuring health and disability at both individual and population levels. The intention here is to provide a common language for functioning, disability, and health and thus provide a model that perceives disability as multidimensional. The different dimensions interact with each other and are composed by functioning at the bodily level, functioning at the individual level, functioning of a person as a member of society, and environmental factors (ICF, 2007). This means that the level of functioning is determined by a dynamic interaction between health conditions and personal and environmental factors.

Practitioners and professionals worldwide have adopted the ICF model as a tool for clinical practice, support services and income support, population statistics, education, policy, and programmes as well as advocacy and empowerment (World Health Organization, 2013) among others.

The ICF model presented below (Figure 4-2) shows how the components interact with each other. In order to clarify how the different components of the model operate together and influence each other, the operationalization of the ICF-model is demonstrated in the context of hearing disability in the second model (Figure 4-3).

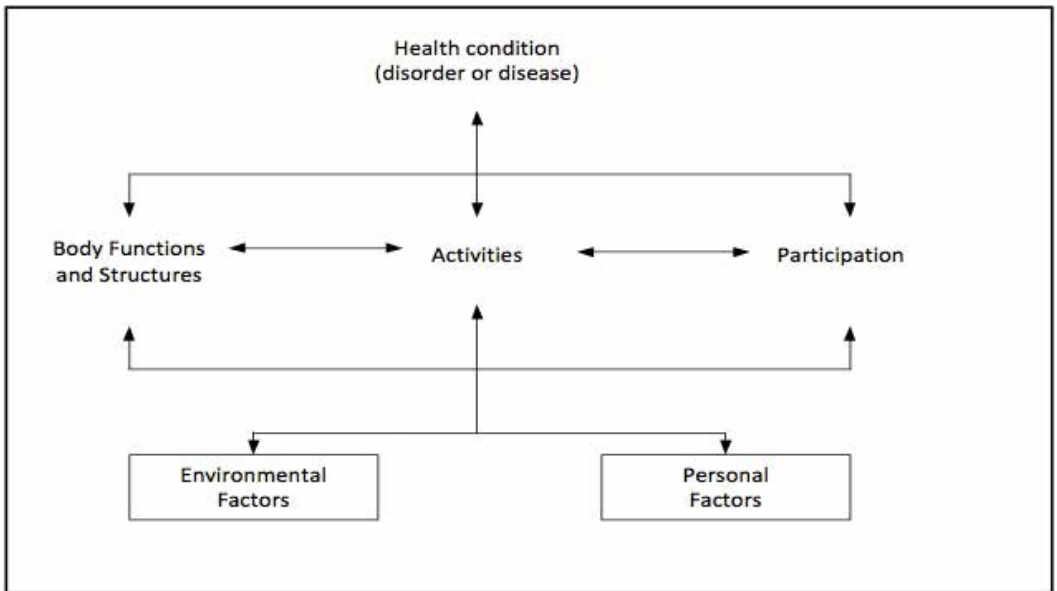


Figure 4-2: The ICF model (WHO, 2001).

Figure 4-2 above is only a template for working with the rehabilitation of persons with disabilities. In order to use the model in a praxis-situation, information needs to be added to the boxes. Figure 13 below is *an example* of how information can be added. In this case, I have used a *persona* (Nielsen, 2004), which is a fictive person built on pieces of information from my previous experiences with the target group. The persona is a tool to understand important aspects of the target group by including bio-psycho-social as well as idealistic characteristics of the group (Nielsen, 2004).

When working with the rehabilitation of hearing-impaired persons in a praxis-situation, practitioners will fill in the boxes, and consequently the information will change with each individual. The model then becomes a tool for the practitioner to understand what constitutes the challenging but also the supportive aspects of a person's life.



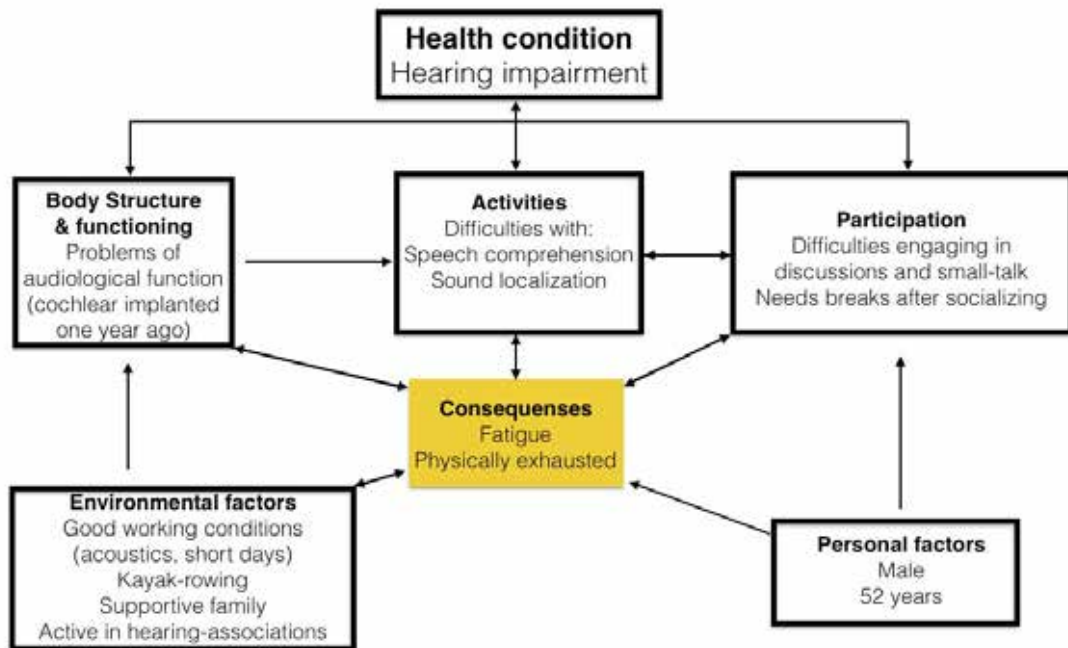
#### 4.3.2. SIMILAR MEDICAL CONDITIONS – DIVERSE EXPERIENCES AND IMPACTS

The yellow box, *Consequences*, in the middle of the model below (Figure 4-3) is not a part of the original ICF-model. The consequences of a disability are often considered to be secondary conditions by the practitioners and researchers working with and evaluating the ICF-model (Jette, 2006). But in the context of this study, they are central to understanding the external life contexts that a person is a part of and also the internal mechanisms that cause experiences of stress.

I consider the consequences of hearing loss to be the most important component in the row of circumstances that may lead to sick leave caused by stress. This is because the consequences of hearing loss are related to how people handle it, how they experience the impact of hearing loss, and how strategies are made to compensate for this disability. One cannot compare two different hearing loss cases, for they – despite apparent medical and physiological similarities – most likely are experienced very differently by each individual. Different life contexts influence the impact that hearing loss has on a person's life, and therefore the experienced impact also differs from person to person.

In the present thesis, I argue that the sense of coherence – the SOC – is decisive in the development of stress and the ability to handle stressors. But I also argue that the sense of coherence level a person experiences is a contributing factor in the different impacts that similar types of hearing losses may have on different people. As a result, what is even more important in this thesis, other than medical audiograms to explain the challenges participants in the study experience, is the story of each person in which the individual explains how his or her hearing loss is experienced in a daily context. These stories have been collected and taken into account at the initiation of a test week (see Appendix C: Participant stories).

Figure 4-3 illustrates an example of how the ICF-model may be filled in as a means of operationalizing it. The box *Consequences* is added to explain the impact of hearing loss. Still, the model does not explain what happens in between the boxes: why, when, and in what specific situations does he experience fatigue and physical exhaustion? Is it before, during, or after certain situations? Also, where and when do positive experiences cause the build-up of energy? How do the time of the day, the type of situation, the people in the room, noise, and inner balance, for example, act together? And what types of experiences do these different combinations of contexts create in each individual?



Katja Lund: 2014 - Aalborg University - Gastberggaard Job and Development Centre

Figure 4-3: Operationalization of the ICF-model through a 'persona'.

The 'health condition' of the *persona* displayed in the model above is hearing impairment. It is a 52-year-old male (box: 'personal factors') whose physical challenges (box: 'body structure and functioning') are problems of the audiological function. When engaging in different activities (box: 'activities'), the greatest challenge for him is to comprehend speech and to localize sound. This results in challenges with participating in society (box: 'participation') as he finds it difficult to engage in discussions and small talk, and he needs breaks alone every time he has engaged in socializing activities. The results (box: 'consequences') of these challenges are mental fatigue and physical exhaustion. Other life circumstances (box: 'environmental factors') are in this case mainly supportive as he has achieved fairly good work conditions while working only part time and spending most of his work hours outdoors. This setting creates the best acoustic surroundings for him. In his spare time, he engages in activities like kayak rowing, which helps him build up

energy, and he is an active part of the local hearing association. This position makes him feel like he is doing something to improve the general situation of hearing-impaired people. Finally, his family tries to understand his situation and to support him – although not always successfully.

The information added to the boxes could have been much more explicit in order to understand the elements that are at play better. However, as this is just meant to exemplify the model's use, I will not go into further detail. Instead, I will try to explain how the different components influence each other – particularly in relation to the component 'consequences'.

1. 'Body structure and functioning': There is a direct link between 'body structure and functioning' and the 'consequences' of a disability because the physical impairment will inevitably have some kind of consequence at some level. But it is important also to note that there can be, at least in the case of hearing loss, an arrow pointing back meaning that if a hearing impaired person is tired and exhausted, it can affect the ability to listen/comprehend.
2. 'Activities': The arrow also points both ways when looking at what is particularly difficult for a hearing-impaired person. After all, as much as fatigue and exhaustion are consequences of speech comprehension and the localization of sound, these actions are also affected negatively by the degree of fatigue and exhaustion a person is experiencing.
3. 'Participation': The same is the case when focusing on participation. The more a hearing-disabled person participates and socializes, the more tired and exhausted he might get, and the more tired and exhausted he gets, the more difficult it is to participate and socialize.
4. 'Environmental factors': even though environmental factors might seem static, the road to obtaining these conditions often depend on the hearing-impaired person himself. And fatigue as well as being exhausted might be a hindrance to obtaining the best conditions. In addition, it takes great insight into what environmental factors and conditions suit the persons' needs depending on individual preferences and the type of hearing loss. It often takes a great deal of experience and self-discovery to reach this insight.

One could say that the present study aims at examining the *arrows* of the second extended model (Figure 4-3). In order to understand the stressors that have an impact on the lives of people with hearing loss, it is necessary to understand the functional impairment and consequences of hearing loss along with the wide range of different situations in connection with different contexts that a person may be involved in. These circumstances can cause the consequences to become explicit and dominating – or maybe the opposite – by diminishing the consequences. The present study dives into these areas and examines them one by one in order to find

patterns that can help explain the situation and the risk of experiencing stress and sick leave among the persons in the target group.

#### **4.4. CQ4: STRESSORS AND RESISTANCE TO STRESSORS**

The salutogenetic idea and sense of coherence are two themes that are central in my understanding of health and resistance to stressors in everyday life. A basic assumption of this thesis is that sense of coherence creates an increased ability to mobilize resistance against stressors in everyday life.

##### **4.4.1. STRESSORS AND THE SALUTOGENETIC IDEA**

The originator of the salutogenetic idea was Aaron Antonovsky – a medical sociologist – who had discovered that a perception of health from a health perspective rather than from a pathological perspective presented some new options for determining where to focus in order to gain resistance to stressors.

The salutogenetic idea is not a patient-oriented concept but refers instead to a perception of health as a continuum between good and bad health. Where traditional medicine aims at defeating disease and focuses primarily on this, the salutogenetic idea considers a human being as a whole containing not only physical and psychological features but also cultural, historical, genetic, and societal traces. These elements can affect which end of the continuum people find themselves. The salutogenetic idea takes into account various factors that may promote movement towards the healthy/unhealthy pole of the continuum and considers a person from a health perspective where even the slightest degree of health has potential to move the person closer to the healthy pole of the continuum. Becoming aware of the stressors in life may have either positive or negative effects on the person and may promote movement towards either one of the poles on the continuum. As such, this awareness is a precondition for working consciously with the health perspective and moving towards the healthy pole.

Stressors in this context are referred to as either internal or external demands to which there are no immediate or automatic adaptive responses. In a pathogenetic perspective, stressors are solely perceived as causing illness. Meanwhile, salutogenetic thinking paves the way to examine the positive impact of stressors that can help counteract man's innate tendency to entropy (Antonovsky, 2000).

Stressors are ubiquitous and can thus be mobilizing under the right conditions. Antonovsky writes:

*‘When studying an organism’s effective adaptation, one can move beyond a post-cartesian dualism and include imagination, love, play, meaning, will, and social structures that promote it. Or as I prefer to put it, theories of coping.’*

[Author’s translation] (Antonovsky, 2000, p. 28)

Even so, Antonovsky does not consider salutogenesis to be the answer to everything. On the contrary, he considers salutogenesis and pathogenesis to be complementary because it is still important to consider the pathogenic effects of stress factors (Antonovsky, 2000)

In the thesis the design of the methodology as well as the interpretation of the research, findings are conducted in light of this understanding of health, illness, and stress factors. This is done so that it is possible to regard stressors as promoting good and bad health. Such an understanding is important in order to assess how the stressors can be managed for the participants so they can remain in the same place or even move towards the healthy pole of the continuum.

#### **4.4.2. SENSE OF COHERENCE (SOC)**

Antonovsky brings a new way of viewing the concept of health. Yet he also provides the answer to how one moves a person toward the healthy end of the continuum. The answer is *sense of coherence* (hereafter referred to as SOC). With knowledge of the components that make up SOC, we can measure it in combination with other factors such as activity and energy level. In addition, knowledge of SOC components in interaction with the forthcoming research findings will help define useful communication tools and reduce stress among hearing-impaired persons in an organizational context.

The SOC has a fundamentally cognitive character in which stimuli is regarded as either information or noise (Antonovsky, 2000). This approach is comparable to Niklas Luhmann’s description of information as coded or non-coded (Luhmann, 2009, p. 183). Luhmann, however, also considers noise to be information – only non-coded information – while Antonovsky considers noise to be negative stimuli and regards information as positive stimuli. The point of this account is that we as

humans are surrounded with what Luhmann says can be seen as information and where some of this information is noise. The communicational theoretical understanding is elaborated on in Chapter 4.5. It is likely that people with hearing loss are subjected to a higher degree of non-coded information – what Antonovsky regards as noise stimuli – due to the reduced ability to make sense of coded information. He connects the understanding of stimuli as either information or noise to the component of *comprehensibility*, which is one of the three components that make up the SOC:

*‘Comprehensibility [...] is about whether one perceives the stimuli, one is faced with either through the internal or external environment, as cognitively understood; as orderly, coherent, structured and clear information instead of noise, which is chaotic, random and inexplicable’* [author’s translation] (Antonovsky, 2000, p. 35).

Hence, people with hearing loss are theoretically more vulnerable in relation to the component *comprehensibility* than persons with normal hearing. A second component, which is also a part of the overall SOC, is *manageability*. When dealing with this component, Antonovsky describes the jinx one always experiences when bad things happen and that person expects that it will continue to always be like that. Such a person feels that he is a victim of circumstance or that ‘life’ has treated him unfairly. But *manageability* also has to do with both material and immaterial resources at one’s disposal:

*‘Manageability [...] is the extent to which one feels that the resources at one’s disposal are sufficient to meet the requirements one is faced with by the stimuli one is flooded with’* [Author’s translation] (Antonovsky, 2000, p. 36).

In relation to persons with hearing-loss *manageability*, one could consider the technical aids at one’s disposal such as a hearing aids, an FM system, an amplified telephone for hearing loss, etc. But it also has to do with other areas of life such as one’s social network and work-stability, a balanced workload, sufficient financial resources, a supportive family, etc.

The last component of the SOC is *meaningfulness*, which is basically the importance of something making sense, both emotionally and cognitively. Activities that are meaningful are often seen as challenges in that it is worthwhile to engage emotionally. People who experience a low degree of *meaningfulness* rarely confess that something has special importance to them. Furthermore, areas that have some degree of importance to them are often seen as things that cause more of a burden on them that they would rather have done without:

*‘Meaningfulness [...] is the extent to which one feels that life is emotionally comprehensible; that at least some of the problems and demands life brings with it are worth investing energy and engagement in; that they are challenges to enjoy*

*rather than burdens one would rather be without'* [Author's translation]  
(Antonovsky, 2000, p. 36).

According to Antonovsky, the three components are inextricably linked. The ability to cope with stressors depends on all three components that make up the total OAS. However, he emphasizes that meaningfulness has a particularly central role. If the individual cannot see the point of engaging in or attempting to master a particular situation, the remaining two components, comprehensibility and manageability, are also affected negatively (Antonovsky, 2000).

## **4.5. Q5: HEARING LOSS AND COMMUNICATION**

The ICF-model described earlier in Chapter 4.3.1 and 4.3.2 represents the mainstream theoretical understanding of disability as activity limitation and as something located in the body or mind of the individual or in the surrounding world. Based on a systems-theoretical perspective, we can also understand disability as communication.

### **4.5.1. DISABILITY AS COMMUNICATION**

According to Michailakis (2004), a systems-theoretical system/environment perspective, rather than the traditional individual/society perspective, will support the understanding of disability as something that is observed in contact with 'the other' through communication as disability is constructed and communicated within interaction systems (Michailakis, 2004). This way, disability can be understood as a social phenomenon – as communication – and not just as a relationship that occurs between the individual and the society. He criticizes existing disability theories (including the IFC-model) for being reductionist and 'fixing-oriented' searching for obstacles that can be attributed to the individual (Michailakis, 2004). If obstacles can be attributed to the individual alone, the responsibility of dealing with these obstacles are also more legally transferred from the societal to the individual level, which is the general tendency as we learned in the chapter on modern work-life (Chapter 4.1). This tendency forces people to accept a definition of society as an association of individual actions rather than as a social phenomenon constructed through communication.

In this thesis, I adopt Michailakis' understanding in order to avoid the individualization trap, which many hearing-impaired people find themselves caught up in. This trap may also increase the problems they experience as they often feel

very alone in the process of dealing with the consequences of hearing loss and a fragile labour market attachment. The aim is, accordingly, to build a holistic rather than a reductionist understanding of what leads to stress/non-stress among hearing-impaired persons in the Danish labour market.

#### 4.5.1.1 Communication

Communication involves, according to Luhmann (Luhmann, 2009), a minimum of two communicators and can therefore not be an individual phenomenon. Communication is made up of an assembly of three communication selections; information, message, and understanding (Luhmann, 2009, Chapter 4). Misunderstandings are a natural part of communication, for differences in the information, communication, and understanding are unavoidable. The same information can be communicated (coded) in many ways, and the same message can be understood (decoded) in many ways. Each communicating party creates meaning by reducing complexity and making selections among open repertoires of opportunities for communications and understandings. Each selection can be considered a qualified guess on what the other communicating party's message refers to (also see Chapter 6.2 for an elaboration on this point). To increase the likelihood of successful communication, the communicating parties must bring previous communications and references to the theme of the communication into play.

The communication procedure is a three-part selection process, where one party selects information based on stimuli from the outside world (first selection). This selection is not observed by anyone other than this first communicating party, who then selects a message for the information (second selection). The second communicating party is the addressee of this message and thus chooses a way to understand the observed message (third selection). The same mechanism applies to the first communicating party as the addressee (Luhmann, 2009). The third selection (choosing a way of understanding the message) becomes increasingly challenging to the addressee when the auditory signal is reduced. This calls for increased contextual and perceptual (in particular visual) awareness to support the reduced auditory signal. If the contextual and perceptual support is non-existing or weak, the disability is expressed more evidently.

The fact that Luhmann calls communication the processing of selection (Luhmann, 2009, p. 181), adds to the understanding of the hearing/listening/understanding process described in Chapter 4.2.4 on hearing loss and memory. Here, we learned that making sense of an auditory signal demands an increased top-down process when hearing loss is present. This means that, to a larger extent, contexts as well as previous knowledge and experiences have to be taken into account in order to



decode a message. This is because the auditory signal is reduced and provides less information than with a normally hearing person. In this case, the visual communication support should also be mentioned since visual communication can add to the overall understanding of what is being communicated. Combined with the system's theoretical perspective, the top-down process then becomes a development of selection based on contexts, previous understandings, and experiences, which supports the perception of communicative selections as qualified guesses.

#### 4.5.1.2 Individualization and society

Communication is a co-creation of understanding and misunderstanding due to the processes of self reference and other reference. Social systems can mainly be understood as products of communication rather than primarily products of cognitive and emotional systems (Michailakis, 2004). After all, there is always more than one cognitive and emotional system present to form a social system, and the access to these systems goes through communication. One could say that communication *represents* parts of the cognitive and emotional systems as the social system is constructed. The responsibility for the social system to work accordingly lies with the social system itself rather than with the individual alone – we could call this the *shared-responsibility concept*. This means that it cannot be the hearing-impaired person's responsibility alone to make the social system work. Unfortunately, this is often the case in praxis-situations. The reason for this could be as simple as the concept of 'majority' where the majority of the persons present decide the character of the communication unless a set of rules or guidelines are followed to control communication. If more than two people are communicating, the majority of the communicators will in most cases be normally hearing persons who tend to 'overrule' the needs of the hearing-impaired person. Overruling needs of a hearing-impaired person will most likely not be a conscious act as one of the biggest problems is the invisible character of the disability. It demands a constant 'drawing-attention-to' by the hearing-impaired person him-/herself in order to change communication. Also, it is the hearing-impaired person who brings needs into the communication situation – needs that represent an unfamiliar communication situation and that may be considered his or her own responsibility to deal with. The other communicators can in theory continue communicating without noticing that the hearing-impaired person has been 'detached' from the conversation. This challenges the shared-responsibility concept further.

My own experiences with the individualization problem regards a general perception in society. We hear that the individual with disabilities needs to take action, make changes, and be 'fixed' to fit into society as a social system and into the different social contexts life offers. Only in a few places can people with

disabilities ‘be themselves’, talk freely about their disabilities as something natural, and still feel like they are in the world because of something other than the disability. But this requires a social system being adapted to the disability as opposed to the individual being adapted to the social system. Such an environment exists at Castberggård where I have heard several hearing-impaired people over the years expressing that they, for the first time, felt properly understood and relaxed about their hearing loss. This happened as they joined a group of course participants with similar problems and life stories. Furthermore, the professionals at Castberggård have knowledge about and experiences with the short- and long-term effects of hearing loss and the tools and methods that can support positive spiral strengthening of labour market attachment. The experience of deaf and hearing-impaired persons outnumbering the normally hearing persons is also an extraordinary experience for many course participants as it helps put their everyday lives into perspective.

#### **4.5.1.3 Communication overload**

Michailakis argues that our senses, feelings, and thoughts are what connect communication in interaction systems with the outside world. Accepting this interpretation puts the concept of disability – whether it is physical or psychological – in perspective as any type of disability to some extent affects the senses, feelings, and/or thoughts. Communication requires a connection to the human being as an organism with the ability to act and a connection to consciousness through the ability to think, perceive, reflect, and feel. Communication is therefore dependent on cognition as the reproduction of thoughts through thoughts while emotions, thoughts, intentions and actions are dependent on the central nervous system. A disability may be considered from a communications perspective, and a perceptual disability may decrease the ability to recognize and produce messages (Michailakis, 2004). Hearing loss is a perceptual disability causing deprivation of the hearing sense. At the same time, loss of hearing affects communication more than loss of sight, for example, does. This is because hearing in itself is essential to the individual’s ability to decode and make sense of communication.

Michailakis claims that any kind of disability reduces the prospects for successful communication at some level, and he claims that any disability will lead to what he calls ‘communication overload’. He defines disability as a juxtaposition of communication overload and activity limitation. I adopt his definition in this thesis as it clarifies the challenges of hearing loss:

The interaction system has problems with its coupling to the environment. Therefore in the system-environment relationship the social system's openness to the environmental information that makes it to a cognitively open system is strained, overloaded or interrupted or in one word; disabled. The disability concept then seems to thematise the difficulties of communication itself. The concept of disability draws our attention to an understanding of the cognitive problems involved in the distinction between information and utterance as well as to the production, reproduction, transmittance, or reception of perceptions.

(Michailakis, 2004, p. 51).

#### **4.5.2. A SYSTEMS THEORETICAL APPROACH TO HEARING LOSS COMMUNICATION**

The following is a description of the communication situation people with hearing loss may find themselves in. It is presented through the description of what is happening in communication between people in general and related to the challenges that may be connected to hearing loss. This conceptual framework builds on Niklas Luhmann's systems-theoretical understanding of communication. Accordingly, it will help accentuate the differences in the preconditions for communicating with and without hearing loss. This conceptual framework will support the understanding of the findings and conclusions in this thesis from a communication-theoretical point of view.

##### **4.5.2.1 Communication and social construction**

Communication is socially constructing in several ways, but one of the ways Luhmann mentions is the closeness and understanding that comes about when, together with others, you are engaged in conversations where different themes alternately dominate the content of the communication. When engaging in this type of communication, the communicators become more intimately attached to each other through the communication where the communicating partners involve each other in matters that will create an increased understanding of the individual's thoughts feelings, desires, interests, and so on (Luhmann, 2009, p. 197). This increases the possibility that the communicating parties can develop empathy for

each other. As people with impaired hearing have poorer ability to participate in communication and are less able to utilize the thematic structures, the conditions to building social relationships through communication are weakened. Themes are structures to reduce complexity in communication (Luhmann, 2009, p. 198), and persons with hearing loss are even more dependent on knowing the theme for the communication than persons with normal hearing. This is because knowing the theme will support the ability to choose an adequate understanding of what is being communicated. After all, this understanding builds on a combination of hearing and guessing when hearing loss is present rather than on hearing alone.

This perspective is also connected to Michailakis description of disability as non-existent as long as there is no interaction with another human being (Michailakis, 2004). That is, it is a social construction, which means that there is no physical representation of '*a disabled person*', but simply a description of observed characteristics of different people's physical and mental possibilities for communication and participation in society. Impairments may be misunderstood and interpreted as negative behaviour or rejection of socializing. This creates a different kind of challenge than those that arise with impaired hearing. These new challenges are more about the construction of a negative narrative about the person. This in turn may affect self-perception and thus start a negative spiral that may lead to the development of a person's failure to thrive, sickness absence, stress, etc.

#### 4.5.2.2 Coded and non-coded information

Luhmann describes coded events as information in the communication process while non-coded events act as interference or noise (Luhmann, 2009, p. 183). Hearing loss contributes to a higher level of non-coded events since not all coded events can be decoded as information when hearing loss is present. Even though the event is encoded as information from the sender, it is not necessarily experienced as coded information by the hearing-impaired person but rather as noise. In addition, many hearing-impaired persons are often more sensitive to noise than people without hearing loss, which means that non-coded events can become more dominant in the consciousness of people with hearing loss. Hearing loss cannot be 'fixed', and the hearing sense cannot be restored completely with hearing aids. In this sense, having a hearing aid is very different to wearing glasses, as an example. Hearing is a complex sense and there are often additional problems with tinnitus and sensitivity to noise, just like differences in the ability to discriminate between sounds makes each hearing loss case unique. Hearing technology is highly developed today, and digitally based noise-reduction systems can separate speech from noise in order to increase the speech signal and reduce disturbing sounds (Lunner et al., 2009). The hearing aid fitting process can be challenging due to the number of *channels* that control noise reduction and sound compression in the

digital hearing aids. Another potential obstacle is *bands*, which mainly control the amount of auditive gain in the different frequency regions. In many recent digital hearing aids, the number of channels and bands are numerous and can be adjusted separately, which makes the fitting process difficult (Chung, 2004). This situation often calls for great patience and many visits to a hearing-care professional before hearing aids are perfectly adjusted to a specific type of hearing loss. And still, there will often be numerous challenges connected to everyday life with hearing loss. Tinnitus can, to some extent, be suppressed by enhancing the hearing aid signal in the frequency region of the tinnitus sound. At the same time, this means that external sounds are enhanced and may cause experiences of increased external noise.

The fact that hearing loss is a disability, which may affect several aspects of life, is made clear through the conceptual framing. The following Part 2 of the thesis is focused on the method to obtain insight into these diverse aspects.

## PART 2

# CHAPTER 5. ARTICLE 1

## ECOLOGICAL MOMENTARY STORYTELLING: BRINGING DOWN ORGANIZATIONAL STRESS THROUGH QUALIFYING WORK-LIFE STORIES

[Published]

*By Lisbeth Højbjerg Kappelgaard and Katja Lund*

### 5.1. ABSTRACT

The purpose of this article is to examine ways in which a combination of ecological momentary assessments and reflective dialogues can provide a methodological framework for qualifying work-life stories in the process of reducing organizational stress. The article is based on two hypotheses: 1) a general as well as a work-related sense of coherence can mobilize resistance to stressors and 2) a sense of coherence can occur through self-reflective narratives which clarify patterns of action for oneself and for others. Focusing on hearing impaired people in the Danish work force as well as primary school teachers, the authors create a stress tracking method based on HRV-measurements coupled with mobile questionnaires and reflective dialogues. Findings in the user-test indicated that the method is a tool that creates a story-based foundation on which it is possible to start a process of talking about own experiences, stress and stressors, strategies, contexts etc. when dealing with organizational stress.

**Keywords:** Ecological Momentary Assessments (EMA), organizational stress, Experience Sampling Method (ESM), Heart Rate Variability (HRV), Sense of Coherence (SOC)

## 5.2. INTRODUCTION

Research shows that an increasing number of people in the working population suffer from occupational stress. This is illustrated by the fact that several occupational medicine clinics in Denmark have experienced more than twice as many referrals of patients over since the turn of the millennium (Rohde, 2006). Several reports conclude that there is a need for research whose results can immediately be converted and used in the practical efforts of organizations to improve the working environment. Also, interdisciplinary and solution-oriented research based on a holistic approach and the involvement of users in research, planning, implementation and dissemination have been called for (Arbejdsmiljøforskningsfonden & COWI, 2006).

### 5.2.1. BACKGROUND

Since 2011, both authors have conducted parallel research in the field of uncovering the growing problem of work-related stress under the auspices of Aalborg University (AAU), Department of Communication and Psychology. One project has a special focus on communication and stress among hearing impaired people in the Danish work force, while the focal point of the second project is to identify which discourses on work-related stress are produced in the professional field of teachers.

In addition to work-related stress as a common target field, the authors shared a methodical ambition as both projects aimed to reflect a holistic perception of stress. Both projects adhered to the basic assumption that stress is a term with several, fundamentally inseparable, dimensions, and both authors worked with a holistic, interdisciplinary, bio-psycho-social stress concept (Zachariae, 2003). In the wake of this understanding of stress, the authors also assumed that in the attempt to elucidate stress, it is necessary to focus on spoken as well as tacit knowledge; spoken knowledge meaning knowledge which is linguistic, rational and articulated, and tacit knowledge meaning knowledge that is not immediately articulated and accessible, yet producing meaningful stories such as bodily experience, memory and behaviour.

From this theoretical starting point followed methodical frustration: how was it possible to reflect a holistic understanding of stress which focuses, at the same time, on body, mind and social factors?



### 5.2.1.1 When "Quantify yourself" paves the way for "Qualify yourself"

In November 2011, both authors participated in the pilot project "Quantify Yourself". This was a methodical turning point. The test lasted a week and was conducted under the research unit "Humansensing", AAU, where four types of Ecological Momentary Assessments (EMA) were tested in combination with each other: Heart Rate Variability (HRV), Galvanic Skin Response (GSR), GPS and an online questionnaire to be answered once an hour. Subjects carried the HRV and GSR sensors as well as a GPS around the clock and accessed the questionnaire with a smartphone.

The authors felt on our own bodies how the combination of different EMA sources provided increased awareness of how, in our daily activities, we manage our energy and react physically and mentally to specific situations and activities. This led us to address questions such as: *Is there anything I should do differently in my life? Why do I sometimes act in a way that basically does not seem to work for me - which brings me mentally or physically to my knees? Why don't I do more of what seems to contribute positively to me - that provides energy?* The responses became a form of electronic diary or a life story that helped us to mirror ourselves and retain memories of behaviour patterns.

At the same time, we felt the value of seeing the spoken and tacit knowledge in a context. The responses to the questionnaires were our spoken knowledge - we could reflect on the experienced energy level and mood and express it. The physical measurements were basically tacit knowledge - we did not have access to knowledge about the moisture level in our skin and why it would increase or decrease. Nor did we have access to knowledge of our exact heart rate or HRV - but access to the tacit knowledge in combination with the spoken knowledge would provide valuable knowledge through stories about behaviour patterns and the management of energy level.

During the pilot project, both authors also experienced the lack of collective, reflective space where we could speak these obtained stories out loud and retain the knowledge we had gained in the past week. Out of this personal experience grew the idea that some adjustment of the method may help to create the reflective space that can qualify work life stories, thus offering an opportunity to create an increased sense of coherence among people who are particularly vulnerable to experiencing stress at work. Our basic assumption is that a method development based on different approaches to EMA combined with reflective dialogues will contribute constructively to articulating the experience of work-related stress and thus open up for increased action at an individual as well as a group level.

### 5.3. RESEARCH QUESTION

*How can a methodical combination of Ecological Momentary Assessments qualify work-life stories that can provide greater insight into and understanding of work-related stress?*

### 5.4. THEORETICAL FOUNDATIONS

The theoretical inspiration for the development of a stress tracking method was taken from the linking of Ecological Momentary Assessment, medical sociology and humanistic psychology. This frame is explicated below.

#### 5.4.1. ECOLOGICAL MOMENTARY ASSESSMENT.

Ecological Momentary Assessment (EMA) is a term that covers a wide range of research methods and traditions, all of which have in common that they provide access to data on the subject's movements in the present and in the specific environment. Examples of EMA may vary from traditional diary keeping to the collection of biosensor-data and online activity logs. Thus, there are various categories of EMA: "Experience Sampling Method" (ESM) is registered subjectively experienced states; "self-monitoring" is records of actions; "ambulatory monitoring" detects the subject's physiological state (Shiffman et al., 2008).

In this article, we are dealing with a combination of ESM in the shape of a mobile questionnaire and ambulatory monitoring represented by HRV biosensor-data.

**Experience sampling method.** The method is particularly suitable for gaining an insight into social, psychological and physiological processes and experiences in the present (Beal & Weiss, 2003). It is the spontaneous here-and-now response that is captured, thus avoiding the biases that might be associated with reflective and memory-based data acquisition (Shiffman et al., 2008). Memory can be selective and has often, in qualitative research as in the treatment of stress methods, been based on interviews and dialogues about experiences that might be months or even years old. The authors acknowledge the value and significance of such stories but also hold the basic assumption that a different time perspective closer to the moment when an experience occurs might offer a different picture of an incident, an experience, a feeling etc. Building the method on EMA combined with a qualitative approach is an attempt to embrace and accommodate both long-term and short-term stories.

**Ambulatory monitoring.** The biofeedback gives us access to the tacit knowledge produced by the physical body (Eller, Kristiansen, & Hansen, 2011; J. Kristiansen et al., 2009). We feel our bodies react when we start to sweat or when the heart is pounding when faced with a challenging situation. But we might not notice small differences in the body's signals that might give away feelings of mental distress or experiences of stress. In continuation of our holistic stress understanding, it is a basic assumption that we cannot always rationalize our way to understanding. Body and mind must be reconciled. If we isolate the action from the body and exclusively connect it to the mind, we ignore the essential human condition that the self is a unity of body and mind (Hastrup, 2005).

#### 5.4.2. SENSE OF COHERENCE

A hypothesis in the method development is that the sense of coherence creates a resistance to stressors - a hypothesis derived from medical sociology. We are inspired by Aaron Antonovsky's salutogenetic idea (Antonovsky, 2000) which, instead of focusing on that which leads to disease (pathogenesis), focuses on that which leads to health and resistance to disease (salutogenesis). Antonovsky's premise is that throughout life, all people are affected by a varying number of stressors. Antonovsky was particularly interested in investigating how people mobilize a resistance to the stressors. What determines how an individual manages to get on with his or her life when challenged with great resistance? According to Antonovsky, the answer to this question is the concept of sense of coherence (SOC). The main point is that the better we are able to see the coherence of different contexts in our lives, the greater the resistance we are able to mobilize against the stressors that life offers us (Antonovsky, 2000).

According to Antonovsky, SOC represents a life-long learning curve. This learning process has the best conditions when we are experiencing life as comprehensible, manageable and meaningful, which are the three key components of the concept of SOC (Antonovsky, 2000).

#### 5.4.3. RECOGNITION THROUGH DIALOGUE

Our understanding of the concept of dialogue is based on humanistic psychology. We are particularly inspired by Kristiansen and Bloch-Poulsen (M. Kristiansen & Bloch-Poulsen, 2000), who define dialogue as unpredictable, risky and exploratory conversations where truth is not predetermined but where recognition is produced in the interpersonal contact. The aim is to jointly produce new insights or options. Central to this dialogue understanding is that dialogue is not only skills but also an

interpersonal way of acting towards each other – it is a way of being. In this regard, we are particularly inspired by Carl Rogers' 3 concepts: congruence, empathy and affirmation, which in our view is crucial to be present with and for the other in the dialogue.

#### **5.4.4. EMA AS A CREATOR OF UNIFYING WORK-LIFE STORIES**

*"If we keep our eyes wide open to reality, the way is open to an increasing understanding",* Antonovsky writes (Antonovsky, 2000). At the same time he writes that the way to understanding and to "opening one's eyes" goes through a person's life stories - this is where the meaningful may occur. Furthermore, writes Antonovsky, it is not certain that a person with a strong SOC has a plan of action. Thus, a person may well feel paralyzed or miss the reflective space that can put them in a position to act constructively. We argue as our second hypothesis that stories and reflections pave the way for action and change, and that these stories and reflections are to be captured and articulated through a methodical combination of EMA and reflective dialogues.

### **5.5. METHOD FRAMING**

The authors conducted the pilot test that was constructed in order to get feedback on both the functionality of the system as well as the method and the structuring of the content and questions. In this article we will not dwell on feedback on the system but rather on the method as a whole.

We chose to test the method on a person representing each of the two groups the authors work with on a daily basis namely teachers and people with a hearing loss.

#### **5.5.1. QUESTIONNAIRES.**

In view of the on-going practice studies for both user groups, the ESM was designed as a mobile questionnaire. The aim is to develop an application that is generally applicable.

Based on general knowledge on stress and specific knowledge on the two user groups, what we finally wished to acquire through the questionnaire was information on: 1) situation (activity the person is involved in and how many

people are in the same room), 2) energy level and mood, 3) SOC (the three components comprehensibility, manageability and meaningfulness).

At the end of the questionnaire, there is the opportunity to write additional text, take a photo or record audio either to measure the noise level or to elaborate on the situation and add thoughts of the moment.

### 5.5.2. USER TEST.

The user test was based on 3 main modules:

*Table 5-1: the design of the user test*

Day	Activity
1	<ul style="list-style-type: none"> <li>• The test persons are introduced to the project</li> <li>• A mobile phone with the application is handed out</li> <li>• The test persons are introduced to the use of the system (questionnaire and HRV equipment), and the HRV equipment is switched on and attached to the chest</li> <li>• The test persons starts filling in the questionnaire once an hour</li> </ul>
2 - 4	Testing
5	A follow-up dialogue based on a reflection exercise and data analysis (day 4 activities) is implemented

#### 5.5.2.1 User test findings

Through user testing we sought to answer the question:

*How can a methodical combination of Ecological Momentary Assessments qualify work-life stories that can provide greater insight into and understanding of work-related stress?*

The following findings from the test run aim at answering the above.

**Can a sense of coherence be tracked?** One of the hypotheses in the development of the method is that the sense of coherence (SOC) can mobilize resistance to

stressors. Therefore, during the test process, we were particularly interested in whether or not, through the method, the test person had the experience of finding greater coherence or a space for greater reflection on the contexts in his life.

### **Findings – Test person 1 (TP1)**

The following are statements from the follow-up dialogue with TP1:

*"It amazes me that I had so much energy when I worked in the evenings throughout the week leading up to the deadline Friday. On the other hand, I was completely exhausted Saturday. I have not thought about it much before how demanding it is and how exhausted I am physically and mentally after such a deadline has been reached."*

Our interpretation of these statements is that through self-monitoring and responding to ESM, TP1 obtains a meta perspective on his own practices and ways of managing energy. The data analysis supplies TP1 with a new insight on both a mental and a physical level, and it provides an elevated sense of coherence through a greater understanding of how different elements that constitute one's life are connected and affect one's actions, reactions and behaviours. It becomes obvious what price his body and mind pay after having reached a deadline. The test person said that he had not previously reflected on how much he subsequently responds to such pressure.

During the test period, TP1 had the – in his own words - "...privilege only to have to focus on finishing the paper". In the follow-up dialogue it became clear that the focus on only one task had given him an extra amount of energy to complete the task and he felt an elevated sense of meaning. To the question: *"How can you use this information?"* he replied, *"I can use the information to see how important it is for me to have a meaningful task. It makes sense to me - it gives me energy, whereas tasks that do not make sense steal my energy."*

In particular, self-monitoring of HRV appears to be meaningful to TP1. His first comment during feedback on this was:

*"Everyone should have access to this! I map many of the activities I do - use my calendar a lot. Here it is interesting for me to see how my body reacts for example when I work in the evening, go for a walk in the city or after an important deadline. Not everyone uses a calendar the way I do and for those who don't I think that this type of questionnaire is a great way to remember what you have been up to..."*

Overall, the statements indicate that the method can be used as a reflexive space that can qualify work-life stories. But several statements also indicated that the

introduction and follow-up dialogues with a test leader who can help explain and clarify concepts and data analysis as well as induce a larger degree of reflection are necessary. For example, during the follow-up dialogue TP1 reflected further on the concepts of balance, overview and meaning:

*"I still find it difficult to interpret the concepts balance, overview and meaning. I find myself reflecting on what you mean by this? "*

Several times throughout the follow-up dialogue, questions about the meaning of concepts are asked. This draws our attention to the importance of giving a thorough initial introduction where the concepts are discussed and explained on the basis of the understanding and the situation of the test person.

### **Findings test person 2 (TP2)**

TP2 sums up his experience of being involved in the test as follows:

*"In general I can say that I have been confirmed in the feeling I had that my mood is often very positive. Moreover, I think that the contexts and people I surround myself with during a normal workday as well as in my spare time have a positive influence on my mental and physical balance".*

This shows the method to be useful in discovering patterns and contexts that can explain certain feelings or a certain level of SOC as it clarifies connections between internal and external factors.

When going through the HRV analysis, the dialogue becomes particularly relevant as it can be difficult to see the difference between a situation of physical activity and a stressful situation. TP2 was interested in knowing how his HRV was affected in a specific conflict situation, and the test leader analysed the time of the conflict on the HRV measurement. It was obvious that he was emotionally and physically affected as he explained that he had to stop a conflict between two of the pupils. His HRV at that time was almost identical to the measurements a moment before when he had been carrying a heavy box up the stairs.

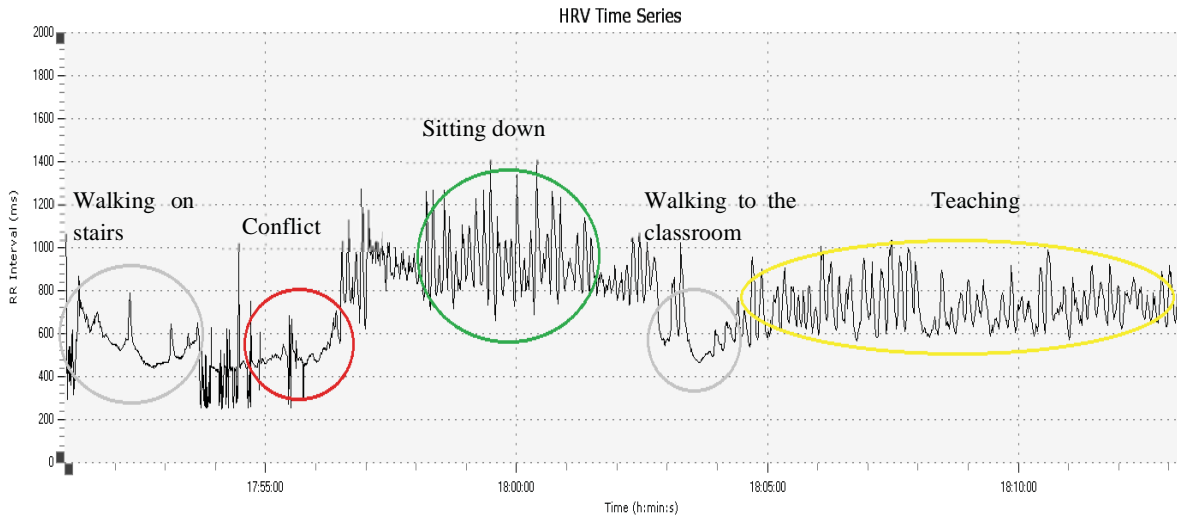


Fig. 5-1. The x-axis illustrates the chronological time and the y-axis illustrates the amount of time between heartbeats (RR Interval). A decreasing variation in the time gap between RR indicates that the body is under some kind of pressure (physical and/or mental).<sup>13</sup>

Identifying a moment like that is of great importance as it gives the test person a possibility to connect the feeling of distress he experienced at that moment with his bodily experience and from that point reflect on ways in which to deal with future conflict situations. The dialogue went on to reflect on his ability to calm down immediately after a stressful situation, which seemed to be comforting him. Also the fact that his HRV was fairly stable during lessons when having to correct the pupils once in a while seemed to have a positive effect on his perception of self. The data from the HRV was compared to the ESM data, which showed that his energy level that day dropped gradually. This had also happened the day before, however, and as we only had 4 days of measurements, it could be a coincidence rather than the expression of a certain connection. TP2 expressed several times that he would have preferred a longer test period in search of more significant patterns.

TP2 reflects on the role of the test leader when talking about the possibility of taking more long-term measurements and analysing data him-self. He says: *"I do not think one should underestimate the value of another person who has not been in the situation to analyse the numbers - looking at it from a different angle might*

<sup>13</sup> The x-axis is the time line. In this example the HRV-equipment was out of sync with the actual time as this HRV-measurement was started at 9.59 am.



*generate different reflections". Furthermore to the question: "Has it made sense to you to be involved in the testing process?" TP2 responds: "Yes, but it only really makes sense when sitting down talking about it."*

In order to become aware of the reasons for engaging in different activities TP2 says: *"... what you write<sup>14</sup> about me scoring high in both energy and mood when I'm engaged in sports activities... these are actually some girls that I coach, and one could ask: why do you coach some girls you don't even know? Well that's because it makes me happy."*

The reflection above underlines the method's ability to find connections and reflect more deeply upon choices in one's life.

Finally he sees the test system as a potentially very useful tool for working in teacher teams, particularly with new school structures in mind, where several teachers and classes merge together for longer or shorter periods of time.

## 5.6. CONCLUSIONS AND REFLECTIONS

**Meta perspective as an impetus for the creation of work life stories.** The main findings of this process indicate that the method is useful in creating the space for reflection and work life stories. Both test persons 1 and 2 express that the ESM and HRV monitoring provided them with a meta perspective on the extent to which their daily activities impact them both physically and mentally. In the follow-up dialogues, both test persons articulate how the method can serve as a useful step for them to gaining more insight into the connection between situations and activities in their work lives and their wellbeing in general.

**Need for methodological triangulation.** The test also proved each part of data acquisition to be essential to the method in order for the test persons to reach a better understanding of their own work life stories and in order for the authors to achieve an accurate understanding of the data. It became clear to the authors that the ESM, the bio-feedback or the dialogues are not sufficient separately. The authors experienced how crucial the dialogues are in order to understand the HRV-data. The authors could have interpreted the HRV curves in many ways, but we could not reach an accurate understanding without the follow-up dialogues. On the other

---

<sup>14</sup> Both test persons received written feedback with an analysis of the ESM and HRV data before the follow-up dialogue.

hand, dialogues without ESM and HRV-monitoring would reduce the authors' and the test persons' insight into both bodily and mental here-and-now reactions.

Though we have reason to believe that this method can qualify work life stories and bring us closer to an understanding of work-related stress, the test also prompted the authors to reflect on some of the potential biases and pitfalls that this method may contain.

**An Individualizing Trap?** The answer to the salutogenetic question is the individual's sense of coherence, which is a lifelong learning process to which the individual himself may open the door through reflections and the creating of life stories. An objection to this particular standpoint might be that on this very point, the method could contribute to the individualization of the stress problem. In this context, individualization signifies the risk that the responsibility for the extent to which the individual copes with everyday stressors may become the individual's own business. The individual "owns" the learning process. It may therefore be argued that the responsibility for whether or not the individual is able to act constructively in various situations rests solely on the individual. Phrased differently: If things cease to make sense or lack the sense of coherence, this is the individual's own fault! The question is whether, on the basis of Antonovsky's concepts, we are moving towards a scenario where SOC applies to the individual alone and therefore undermines the articulation of critical conditions in the individual's work life – conditions which are beyond the individual's responsibility. On this matter, it is very important for the authors to emphasize that SOC cannot be reduced to a psychological characteristic that directs behavior. It is our belief that SOC – or the lack of it - occurs in a dialectical relationship between the individual and his/her surroundings.

**Ethical issues regarding the data.** In this regard, the authors also find it crucial to consider ethical issues pertaining to the data. An organizational context is an arena with many interests and relations, which are both symmetric and asymmetric. Power is at stake between employees and managers. Goals differ. Therefore, the authors emphasize that this method in itself should be used with great care and include reflection on at least the following questions: Who owns the data? Who gains an insight into what and why? What purpose does the monitoring serve?

## **CHAPTER 6. ARTICLE 2**

# **ER MIN HOVEDPINE *MIN* HOVEDPINE? – OM SELVMONITORERING OG REFLEKSIVE DIALOGER SOM LED I EN SAMMENHÆNGENDE OG AF- INDIVIDUALISERENDE FOREBYGGELSESSTRATEGI FOR ARBEJDSRELATERET STRESS**

[Published]

*Af Lisbeth Kappelgaard og Katja Lund*

### **6.1. ABSTRACT**

Flere erhvervsaktive mennesker rammes af stress end tidligere. Behandlingsområdet bærer samtidig præg af at mangle virkningsfulde metoder og ikke mindst en sammenhængende strategi for forebyggelse og behandling af stress. I nærværende kapitel præsenteres metoden Ecological Momentary Storytelling, som er udviklet med henblik på at kvalificere arbejdslivsfortællinger gennem selvmonitorering og refleksive dialoger for at tilvejebringe bevidsthed om stressorer i arbejdslivet. I 2013 og 2014 gennemførtes 11 testforløb. Resultaterne fra disse forløb indikerer, at metoden har potentiale som supplement eller som et væsentligt bidrag i den eksisterende forebyggelses- og behandlingsindsats mod arbejdsrelateret stress.

## 6.2. PROBLEMFELT – ARBEJDSRELATERET STRESS

Flere og flere rammes af arbejdsrelateret stress. Tal fra Statens Institut for Folkesundhed viser, at antallet af personer, der oplever en høj grad af stress, i perioden 2005 – 2010 er steget med næsten ti procent hos den voksne danske befolkning, og hver fjerde i beskæftigelse oplever et højt stressniveau (Christensen m.fl., 2010). Dette understreges af, at flere arbejdsmedicinske klinikker siden starten af 0'erne har oplevet en stærk stigning i henvisninger af patienter med psykiske belastningsreaktioner (Rohde, 2006). I den seneste undersøgelse fra det Nationale Forskningscenter for Arbejdsmiljø angiver 95 procent af respondenterne at arbejdet er en del af forklaringen på oplevelsen af stress. Hele 52 procent siger, at det udelukkende er arbejdet, der er årsag til, at de har følt sig stressede, mens 43 procent angiver en kombination af arbejdsmæssige og private forhold som årsag til stressramthed. De sidste 5 procent angiver, at det udelukkende er privatlivet, som er kilde til stress (Madslund & Rydahl, 2013).

### 6.2.1. BEHANDLING

På trods af problemets omfang, er det til stadighed vanskeligt at finde virkningsfulde behandlingsformer (L. Nielsen, Curtis, Grønbæk, & Nielsen, 2007). Megen behandling varetages af mindre, private konsulentvirksomheder. At behandlingsmarkedet ser sådan ud, har flere forskellige konsekvenser. Det betyder blandt andet, at den viden, der opnås om behandling af arbejdsrelateret stress, er meget spredt, og derfor i ringe grad danner basis for en national strategi på området (L. Nielsen et al., 2007). Det betyder ligeledes, at de fleste indsatser på området udspringer af 'lokal fornuft', dvs. konsulentens egne erfaringer, teorier og metoder med en ringe tilbøjelighed til at skele til evidensbaseret forskning på området og til efterfølgende at måle effekten af indsatsen (Nielsen m.fl., 2007). Dette betyder dermed også, at den forskningsbaserede viden, som eksisterer på området, sjældent omsættes i de eksisterende behandlingstilbud. Vi står altså med en problemstilling, der så at sige 'bider sig selv i halen': Den forskningsbaserede viden anvendes kun i begrænset omfang i behandling, og samtidig er behandlingspraksis så fragmenteret, at denne ikke bidrager til samlet indsigt og erfaringsopsamling, som ville kunne bidrage til evidensbaseret viden og en samlet strategi på området.

### 6.2.2. FOREBYGGELSE

I forhold til den forebyggende del anbefaler Sundhedsstyrelsen, at man, hvis man befinder sig i farezonen for at blive stressramt, lytter til kroppens signaler (Nielsen & Kristensen, 2007; Sindballe & Hjalsted, 2007). Udfordringen er her, at hvis man netop ER i farezonen, vil tilbøjeligheden til at stoppe op og reflektere over eller

identificere kroppens signaler som et udtryk for en stressreaktion oftest være vag. De fleste stressramte fortæller, hvordan de har været gode til at overse signaler, som på bagkant af deres stressforløb står som insisterende, blinkende advarselsslamper (Damsgaard-Sørensen & Madsen, 2003; Prætorius, 2011). Et eksempel finder vi i vores forskningsprojekt hos en tidligere stressramt lærer. Hun beretter under et interview om talrige fysiske og psykiske symptomer som optakt til det endelige sammenbrud med stress og depression: Søvnløshed, koncentrationsbesvær, 'kort lunte', voldsom spændingshovedpine, lydfølsomhed i en grad så hun nægtede hele familien at høre radio etc. Hun beskriver, hvordan hun i månedsvis havde det, som om hun havde en jernring spændt om sit hoved. Efter flere lægekonsultationer fandt hun ud af, at hun havde behov for skærmbriller. Det var hun lykkelig for, for så var kilden til smerten sandsynligvis fundet. Det viste sig dog ikke at hjælpe, og hendes symptomer tog til. I hele optaktsfasen valgte hun ikke at kontakte sin leder, da hun oplevede symptomerne som et individuelt helbredsanliggende – hendes hovedpine hendes problem, så at sige. Ud over hendes evne til at overse symptomer er der især to andre karakteristika i fortællingen, som synes at være gennemgående og væsentlige for den slags beretninger: For det første, at stress typisk er en udelukkelsesdiagnose i den forstand, at den ofte er resultatet af, at en lang række andre behandlinger ikke har virket. Dermed går der som regel lang tid, før der tages fat om nældens rod (Netterstrøm, 2012). For det andet vidner fortællingen om, at stress i høj grad gøres til et individuelt anliggende, som sjældent adresseres på et organisatorisk niveau (Nielsen et al., 2007) til trods for at 95 procent af de stressramte tilkendegiver, at arbejdslivet er en væsentlig kilde til deres sygdomsforløb (Nielsen et al., 2007).

Kaster man et blik på den eksisterende arbejdsmiljøforskning i Danmark, er det således med god grund at flere rapporter peger på behovet for forskning, hvis resultater hurtigt kan omsættes og anvendes i organisationers praktiske indsats for at forbedre arbejdsmiljøet. Især efterspørges tværfaglig og løsningsorienteret forskning, der tager udgangspunkt i et helhedssyn, og som i højere grad inddrager brugerne i forskningens planlægning, gennemførelse og formidling<sup>15</sup>. Hovedformålet med at udvikle Ecological Momentary Storytelling er et eksplicit forsøg på at forfølge disse italesatte behov – for behovet er stort og akut.

---

<sup>15</sup> Eksempelvis i Verner Sand Kirk Rapporten, udarbejdet af Arbejdsministeriet 2001, i rapporten *Kortlægning og analyse af dansk arbejdsmiljøforskning*, udarbejdet af Arbejdsmiljøforskningsfonden, 2006, og i notat fra Statens Institut for Folkesundhed, *Forebyggelse og behandling af stress i Danmark*, 2007.

### 6.3. I BEGYNDELSEN VAR ORDET...

I regi af Aalborg Universitet, Institut for Kommunikation, har forfatterne siden 2011 arbejdet med hver sit Ph.d. projekt, som har fokus på at afdække det stigende problem omkring arbejdsrelateret stress. Det ene projekt har særligt fokus på erhvervsaktive med hørenedsættelse og problematikker relateret til hørelsen som potentielle stressfaktorer (Stephens og Kramer, 2010; Christensen, 2006; Clausen, 2003 m.fl.), mens omdrejningspunktet i det andet projekt er at afdække hvilke diskurser om arbejdsrelateret stress, der produceres i det lærerfaglige felt, hvor antallet af stressramte antager et stadigt større omfang (Kristensen, 2013).

Ud over at have arbejdsrelateret stress som fælles genstandsfelt, havde forfatterne både en metodisk ambition og en metodisk frustration, som var sammenfaldende. Begge projekter tog oprindeligt afsæt i en kvalitativ metode: vi ville tale os ind til kernen af stressproblematikken – gå i dialog med de relevante aktører og den vej rundt blive klogere på det, der er på færde i praksis. Samtidig var begge forfattere optaget af, at undersøgelserne skulle give stemme til de mennesker, som har prøvet praksis, og evt. også stressramthed, på egen krop. Det var *deres* fortællinger, vi gerne ville have fokus på. Efter at have gennemført en mængde dialoger stod vi begge med samme eftertænksomhed og frustration. Vi havde opnået indsigt i praksis, men samtidig havde vi en oplevelse af, at mange af samtalerne var fornuft produceret på bagkant. Fortællingerne skitserede forløb som lå måneder eller år tilbage. En fortælling bygget på hukommelse og 'bagkantsfornuft' kan være frugtbar og rumme kvaliteter – vores hukommelse sætter os i stand til at aktualisere en glemt viden, og hvis det ikke var for denne evne til både at glemme og huske, ville vi være overladt til vanviddet (Middleton & Brown, 2005). Dog peger megen forskning på, at der er forskel på de fortællinger, som produceres ud fra hukommelsen og de fortællinger, som afspejler spontane her-og-nu reaktioner på at befinde sig i praksis (eksempelvis: Ptacek, Smith, Espe, & Raffety, 1994; Raudaskoski, 2010; Shiffman, Stone, & Hufford, 2008; Stone et al., 1998). Hvordan forholder vi os så til disse forskelle? Hvordan indfanger vi begge typer af fortællinger? En måde at undersøge det spontane her-og-nu kunne selvfølgelig være at sætte sig ned på bagerste række i et klasseværelse eller følges med en hørehæmmed gennem et antal arbejdsdage. Men ville vores observationer da stemme overens med aktørernes egenoplevelser? Og ville vi ikke dermed sælge ud af idéen om at give stemme til aktøren selv? En anden problematik i forhold til at indtage en observatørrolle, var en grundantagelse om, at der også kan ligge en tavs viden ift. stress – eksempelvis kropslige reaktioner, som ikke er observerbare. De kropslige signaler kan kun føles af individet – det er et 'private language' (Wittgenstein, 2011) eller en 'tavs viden' (Hastrup, 2005), som ikke er tilgængelig, før det gøres til et 'shared language' (Wittgenstein, 2011) eksempelvis gennem dialog. Derfor var det centralt for os at udvikle en metode, der kunne bibeholde aktørens EGET perspektiv i forhold til såvel den talte som den tavse viden (Pink & Mackley, 2012). Med den talte viden, menes der den viden som er sproglig, rationel

og artikuleret. Den tavse viden omfatter her kropslige erfaringer, hukommelse, reaktioner og viden, som umiddelbart ikke er artikuleret og tilgængelig, men som alligevel producerer betydningsfulde fortællinger (Hastrup, 2005).

### 6.3.1. KVANTIFICERING BLEV TIL KVALIFICERING

I 2011 blev vi kontaktet af en kollega, der inviterede til at deltage i eksperimentet 'Quantify Yourself'. Eksperimentets formål var at undersøge hvilken type data, der kan genereres gennem forskellige former for biosensordata, når mennesker monitorerer sig selv i dagligdagen. Metodisk set skulle det vise sig at blive en 'det-du-søger-finder-dig'-oplevelse for os begge.

Eksperimentet var af en uges varighed og blev gennemført under forskningsenheden 'Humansensing', Institut for Kommunikation ved Aalborg Universitet. Forsøgspersonerne bar hjerterytme-målere, GPS og målere til at registrere hudens fugtighed døgnet rundt. Desuden besvarede vi mobile spørgeskemaer om energiniveau, humør m.v. en gang i timen. Vi erfarede her på egen krop, hvorledes kombinationen af forskellige datakilder tilvejebragte øget refleksion. Bevidstheden om, hvordan daglige gøremål både kunne tilføre og tage energi, hvordan fysik og sind reagerede på bestemte situationer, aktiviteter og relationer, fik os til at adressere spørgsmål, såvel til os selv som til vores omgivelser: *Er der noget, jeg bør gøre anderledes i mit arbejdsliv? Hvorfor handler jeg ind imellem på en måde, som dybest set ikke ser ud til at fungere for mig – som bringer mig mentalt eller fysisk i knæ? Hvorfor gør jeg ikke noget mere af det, der ser ud til at bidrage positivt for mig – som giver energi?* Besvarelserne blev en form for elektronisk dagbog, som fastholdt erindringer om egne handlemønstre som et metaperspektiv på hverdagen. Blot oplevede vi begge at mangle én at spille bolden op ad for at kunne handle aktivt på den nye viden om os selv – vi manglede med andre ord at omdanne vores 'private language' (den tavse viden) til 'shared language' (den talte viden).

Ud af disse erfaringer voksede nysgerrigheden på, om denne tilgang kunne skabe samme metaperspektiv hos hhv. lærerne og hørehæmmede. For at kunne bidrage til en forståelse af sammenhængen mellem mentale/fysiske reaktioner og potentielle stressorer i dagligdagen tilføjede vi et 'rum' til at reflektere og bevidstgøre disse arbejdslivsfortællinger gennem dialog. Vores grundantagelse var således, at en metodeudvikling, bygget op om forskellige tilgange til dataindsamling kombineret med opfølgende dialoger, ville kunne bidrage til at sætte ord på og belyse oplevelsen af arbejdsrelateret stress - og dermed potentielt åbne op for et øget handleberedskab. Eksperimentet blev således et metodisk vendepunkt og startskuddet til udviklingen af Ecological Momentary Storytelling, som vi definerer således:

*Ecological Momentary Storytelling er en metodisk triangulering, der ved hjælp af ecological momentary assessments og refleksive dialoger anvendes til at skabe en bevidsthed om oplevelsen af sammenhæng i den daglige praksis.*

Centrale emner som EMA (ecological momentary assessments), OAS (oplevelse af sammenhæng), bevidsthed og dialog uddybes i de følgende afsnit.

### 6.3.2. ECOLOGICAL MOMENTARY ASSESSMENTS

EMA – eller ecological momentary assessments – dækker ifølge Shiffman m.fl. (2008) over viften af forskningsmetoder og -traditioner, der alle har det tilfælles, at de giver adgang til data om subjektets færden i nuet i dets naturlige miljø. Ordet *ecological* kan oversættes til 'miljømæssig'. *Momentary*, eller på dansk momentan, er et moment, der indtræder pludseligt, og kan være synonym med 'øjeblikkelig' og 'her-og-nu'. Endelig kan *assessment* oversættes med 'evaluering', 'bedømmelse' eller 'vurdering'. En oversættelse af begrebet kunne således være *en øjeblikkelig, her-og-nu vurdering af miljømæssige tilstande* - miljømæssig her forstået bedst ud fra en systemteoretisk sammenhæng, hvor det både handler om det indre og det ydre miljø og en autopoietisk evne (Maturana og Varela, 1980) til at imødekomme stressorer. Dvs. individets evne til tilpasning i naturlige omgivelser (i modsætning til eksempelvis et laboratorium eller en 'mock up' arbejdsplads) vurderes i et givent øjeblik.

Eksempler på EMA kan variere fra traditionel dagbogsføring til indsamling af data om kroppens reaktioner samt online aktivitets-logs, som dem vi testede i 'Quantify Yourself'-eksperimentet. Der er således mange forskellige kategorier af EMA. I metoden, Ecological Momentary Storytelling, anvender vi online aktivitets-logs, der ifølge Shiffman m.fl. (2008) hører under den type EMA, der benævnes *experience sampling method*. Her registreres subjektets oplevede tilstand i nuet via en mobil-applikation, der minder aktøren om at indtaste besvarelser en gang i timen.

Derudover måler vi på subjektets fysiologiske tilstande, der hører under EMA-kategorien ambulatorisk monitorering (Shiffman m.fl., 2008). Til denne type dataopsamling er det konkrete redskab en kropsbåren måler, der registrerer HRV (hjerterytmevariabilitet) - altså variationen i tidsintervallet mellem hjertets slag. Denne type data er forskningsmæssigt fundet særligt anvendelig ved registrering af stresslignende tilstande (J. Kristiansen et al., 2009; McCraty, Atkinson, Tomasino, & Bradley, 2009) idet hjernen via det autonome nervesystem sætter hjertet i gang. Det autonome nervesystem er delt op i det sympatiske og det parasympatiske system, der hele tiden interagerer med hinanden og skaber en henholdsvis øgning



og sænkning af hjerterytmen, hvilket afspejler sig i hjerterytmevariabiliteten, som dermed kan hjælpe med at indikere stresslignende tilstande (Taelman m.fl., 2009).

### 6.3.3. OPLEVELSE AF SAMMENHÆNG

Den teoretiske inspiration hentes desuden i en sammenkobling af medicinsk sociologi og en narrativ-interaktionistisk begrebsramme. Fra den medicinske sociologi er vi særligt inspireret af Aron Antonovsky<sup>16</sup>, hvor fokus lægges på salutogenese frem for patogenese, og hvor den enkeltes oplevelse af sammenhæng i livet antages at spille en væsentlig rolle for trivsel eller mistrivsel. Ifølge Antonovsky opstår det meningsfulde, herunder oplevelsen af sammenhæng i livet, gennem selvrefleksive fortællinger, hvor man tydeliggør handlemønstre for sig selv og andre. Det er netop igennem fortællingen fra nuet med en skuen bagud og forestillinger om fremtiden, at mennesket oplever og forstår sit liv i sammenhænge. Fortællingen er således forståelsens smeltedigel (Antonovsky, 2009; Thybo, 2003).

Antonovskys arbejde førte frem til den såkaldte salutogenetiske idé, hvor fokus flyttes fra, hvad der fører til sygdom hen imod hvad der fører til sundhed eller modstandskraft mod sygdom. Antonovskys udgangspunkt er, at alle mennesker, gennem hele livet, påvirkes af forskellige belastninger eller stressorer. Nogle mennesker mere end andre. Nogle mennesker voldsommere end andre. Det interessante i den forbindelse var, for Antonovsky, at se på, hvorledes mennesker mobiliserer en modstandsdygtighed overfor de stressorer, som rammer dem. Hvad er afgørende for, at det enkelte menneske så at sige 'klarer skærene' og kommer videre i deres liv trods den modstand som møder dem?

---

<sup>16</sup> Aaron Antonovsky var frem til sin død i 1994 professor ved afdelingen for medicinsk sociologi ved det sundhedsvidenskabelige fakultet, Ben Gurion University og Negev, Beersheba, Israel. I modsætningen til flertallet inden for stressforskning arbejdede Antonovsky tværparadigmatisk således at biologiske, psykologiske og sociologiske forståelser af og forklaringsmodeller på stress bringes i spil. Netop denne arbejden på tværs oplever vi som meningsfuld i forhold til at opnå en helhedsforståelse af arbejdsrelateret stress, hvor fysiske reaktioner, sociale/miljømæssige sammenhænge og egenoplevelser ikke kan skilles ad og give en fyldestgørende forklaring på stressproblematikken hver for sig, men må ses som et hele.

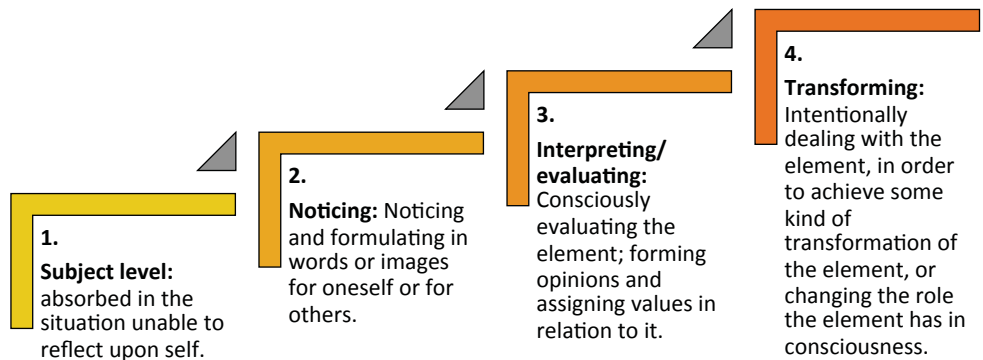
Svaret på det salutogenetiske spørgsmål blev begrebet oplevelse af sammenhæng – eller OAS (Antonovsky, 2009). Hovedpointen er, at jo større oplevelse af sammenhæng vi oplever i vores liv, des større modstandskraft kan den enkelte eller en gruppe af personer mobilisere mod de stressorer som livet byder os. Antonovsky definerer OAS således:

Oplevelsen af sammenhæng er en global indstilling, der udtrykker den udstrækning, i hvilken man har en gennemgående, blivende, men også dynamisk følelse af tillid til at (1) de stimuli, der kommer fra ens indre og ydre miljø, er strukturerede, forudsigelige og forståelige; (2) der står tilstrækkelige ressourcer til rådighed for en til at klare de krav disse stimuli stiller; og (3) disse krav er udfordringer, der er værd at engagere sig i. (Antonovsky, 2009, p. 37)

Disse tre punkter udgør grundelementerne i OAS, som er samlet i benævnelserne 'begribelighed', 'håndterbarhed' og 'meningsfuldhed', og som gennem bevidstgørelse udgør en læreproces, der varer livet ud (Antonovsky, 2000).

#### **6.3.4. BEVIDSTHED**

Med udgangspunkt i Antonovsky er det groft sagt OAS, vi forsøger at 'tracke' og skabe bevidsthed om gennem selvmonitorering. Antonovsky forholder sig ikke selv til begrebet bevidsthed. I vores forståelse af begrebet bevidsthed trækker vi derfor på Jordans (2001) beskrivelse af forskellige bevidsthedsstadier og det enkelte menneskes mulighed for at bevæge sig fra et stadie til et andet.



Figur 6-1. Jordans fire bevidsthedsstadier

På det første stadie er man således ifølge Jordan (2001) absorberet i situationen uden at være i stand til at reflektere over selvet. På stadie 2 begynder man at lægge mærke til, samt formulere, hvordan selvet agerer i forhold til forskellige situationer. På det 3. stadie begynder man at kunne tolke og evaluere på de nye observationer, og på stadie 4 bliver man i stand til at skabe ændringer i sit liv baseret på en objektiv og betragtende refleksion over selvet i relation til ændringer i det indre og ydre miljø (Jordan, 2001). Bevidsthedsstadie 1 (*subject level*), minder for os at se, meget om den tilstand potentielt stressramte befinder sig i, og som er problemfyldt i forhold til Sundhedsstyrelsens anbefalinger om at lytte til kroppens signaler. Om denne tilstand skriver Jordan: "... one is simply so occupied with experiencing that one doesn't get the idea to ask such questions as: *Why do I feel this way now? Do I want to feel like this? What made me draw that conclusion? Do I want to react in this way? Etc.*" (Jordan, 2001, p. 1). På bevidsthedsstadie 1 er den enkelte så opslugt af at være i praksis, at det er umuligt at gøre praksis til genstand for iagttagelse og refleksion. Det helt centrale for at kunne bringe sig i en refleksiv position i forhold til egen praksis består i første omgang i at skabe afstand til praksis. Det handler med andre ord om at bevæge sig væk fra sin egen 'absorbering' for at kunne reflektere over praksis og handlemønstre og derigennem bane vej for at træffe kvalificere valg i måden man forvalter og forholder sig til sin praksis. Dette er præcis ambitionen i Ecological Momentary Storytelling. Selvmonitorering, og de efterfølgende dialoger, er på en og samme tid en måde at fastholde her-og-nu reaktioner, men i fastholdelsen ligger også muligheden for at holde reaktionerne ud i strakt arm, betragte dem, gøre dem til genstand for refleksion og tilvejebringe øget bevidsthed og handlemønstre. Metoden handler netop om at "...get the idea to ask..." og derigennem få øje på sig selv.

### 6.3.5. DIALOG

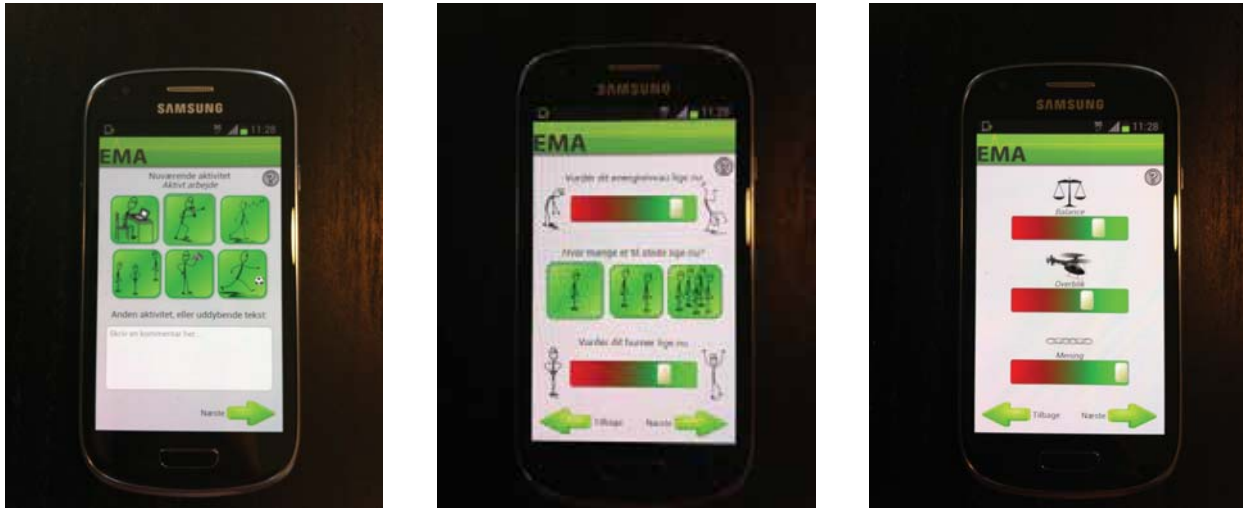
I vores forståelse af dialogbegrebet baserer vi os på humanistisk psykologi. Vi er særligt inspirerede af Kristiansen og Bloch-Poulsen (2000), der definerer dialog som uforudsigelige, risikofyldte og udforskende samtaler, hvor der ikke findes nogen forudbestemt sandhed og hvor erkendelser produceres i den interpersonelle kontakt. Målet er sammen at åbne op for nye indsigter og muligheder. Centralt for denne dialogforståelse er, at det er en særlig måde at være til stede på – en særlig kontaktform. Her er vi inspirerede af Carl Rogers' tre forholdemåder: *"Empathy, congruence and unconditional positive regard"* (Rogers, 1951), som grundlæggende forholdemåder for at kunne være til stede med og for den anden i dialogen.

### 6.3.6. METODEENS DELEMENTER

I metoden anvendes experience sampling method – forkortet ESM – der er installeret som en mobilapplikation på en smartphone, således at testpersonen kan interagere med skærmen. ESM besvares en gang i timen dagen igennem. Aktøren bliver bedt om at svare på, hvilken aktivitet han eller hun er involveret samt egen oplevelse af energi og humør. Samtidig bliver der via tre hovedkategorier: balance, overblik og mening<sup>17</sup>, spurgt ind til oplevelse af sammenhæng (OAS). Endelig er det muligt at tage et billede og/eller optage et lydclip.

---





<sup>17</sup> En 'oversættelse' af de tre hovedkomponenter: begribelighed, håndterbarhed og meningsfuldhed, der ifølge Antonovsky (2009) tilsammen udgør OAS, således at det i situationen er lettere at lave en hurtig vurdering. Eksempelvis er det lettere at forholde sig til, om man har overblik over situationen end at forholde sig til begrebet håndterbarhed som en mere abstrakt størrelse.



Figur 6-2, Billede 1-3: Billederne viser skærbilleder af applikationen, hvor aktiviteter og oplevelser kan logges gennem hele dagen. Billede 1 (fra venstre) viser det skærbillede, hvor man kan registrere den aktivitet, man er engageret i, ligesom man kan tilføje tekst. Billede 2 (i midten) viser det skærbillede, hvor man kan logge oplevelsen af energiniveau, antal mennesker i rummet samt humør. Billede 3 (til højre) viser det skærbillede, hvor man kan logge OAS ved at registrere en vurdering af, om man føler sig i balance, har overblik og oplever, at det man laver giver mening.

Opsamlingen af data uploades automatisk til en profil på internettet, hvor besvarelserne kan sammenlignes på forskellige tidspunkter af døgnet, og hvor den enkelte kan danne sig et overblik over sine egne besvarelser som illustreret i det følgende.

ER MIN HOVEDPINE MIN HOVEDPINE? – OM SELVMONITORERING OG REFLEKSIVE DIALOGER SOM LED I EN SAMMENHÆNGENDE OG AF-INDIVIDUALISERENDE FOREBYGGELSESSTRATEGI FOR ARBEJDSRELATERET STRESS

22. Feb 13 kl. 19:27:09	4	2	6	0	0	5	5	6	3			
Tidspunkt	Energi	Antal personer	Humør	Komm.	Støj	Balance	Overblik	Mening	Aktivitet	Supp.tekst	Billede	Lydklip
23. Feb 13 kl. 08:42:33	9	1	9	0	0	9	9	9	3	Gør klar til morgne		
23. Feb 13 kl. 09:57:21	8	3	9	0	0	9	9	9	3	I biffen		
23. Feb 13 kl. 10:41:31	8	3	9	0	0	9	9	9	3	Bif		
23. Feb 13 kl. 11:55:39	8	3	4	0	0	7	7	6	3	Konflikt med adam		
23. Feb 13 kl. 12:42:50	8	3	9	0	0	8	8	8	3	Rydder op efter froko		
23. Feb 13 kl. 13:52:16	9	3	9	0	0	9	9	9	3	Bager		
23. Feb 13 kl. 14:43:19	7	3	8	0	0	7	7	9	3	Gør klar til cykeltur		
23. Feb 13 kl. 15:42:28	8	3	8	0	0	8	9	8	3	Pynter fasteløvnssbolier med adam		
23. Feb 13 kl. 17:02:53	9	2	9	0	0	9	8	9	6	Cykler		
23. Feb 13 kl. 17:42:09	8	1	7	0	0	8	9	9	3	Laver mad		
Tidspunkt	Energi	Antal personer	Humør	Komm.	Støj	Balance	Overblik	Mening	Aktivitet	Supp.tekst	Billede	Lydklip
23. Feb 13 kl. 18:44:52	5	3	8	0	0	8	7	8	5			
23. Feb 13 kl. 19:42:57	5	3	9	0	0	9	7	9	3	Laver popcorn mens børnene leger		
23. Feb 13 kl. 20:45:50	5	3	8	0	0	8	6	8	3			

Figur 6-3. Online ESM-profil

Ovenstående er et screenshot af den personlige profil, som den præsenteres for testpersonen online. Profilen på billedet tilhører den ene af forfatterne. Her kan man i venstre lodrette side se dato og tidspunkt for besvarelser. De vandrette linjer viser, hvorledes man har svaret indenfor de forskellige kategorier. Et højt tal indikerer højt energiniveau, humør samt god oplevelse af sammenhæng. Derudover kan man registrere hvor mange personer, der befinder sig i rummet, ligesom man kan tilføje tekst, tage et billede, optage et lydklip samt se, hvor man befandt sig under besvarelsen. Designet er fleksibelt og der kan tilføjes kategorier efter behov. De to kategorier 'kommunikation' og 'støj' er eksempelvis aktive, når vi tester gruppen af mennesker med høretab.

Ambulant monitorering foregår via målinger af HRV (hjerterytmevariabilitet). Dette valg var dels begrundet i egne erfaringer fra Humansensing-forløbet, hvor vi oplevede at denne data tilførte os en værdifuld indsigt og dels var det begrundet i en forskningsbaseret viden om sammenhængen mellem stress og hjerterytmevariabilitet.



*Figur 6-4, Billede 4: HRV-måleudstyret er fra det finske firma Mega Electronics (<http://www.megaemg.com/products/emotion-hrv/>). Elektroderne, der påsættes huden under højre kraveben samt på venstre side af brystkassen, kan klikkes på i de to ender, og udstyret hænger således næsten vægtløst på testdeltagerens bryst, der bærer måleren døgnet rundt.*

Hjerterytmemålingerne giver os adgang til den tavse viden, som kroppen producerer, og som den enkelte aktør i udgangspunktet ikke nødvendigvis er opmærksom på. Kroppen kan naturligvis sende signaler, som bliver tydelige for den enkelte aktør, men det er som oftest først, når der sker afvigelser i kroppens signaler, at den påkalder sig opmærksomhed (Hastrup, 2005). I forlængelse af vores holistiske stressforståelse er det en grundantagelse, at vi ikke altid kan rationalisere os til en forståelse. Krop og tanke må ses i sammenhæng. Hvis man afskærer handlingen fra kroppen og udelukkende tilskriver den tanken, overser man det essentielt menneskelige vilkår, at selvet er en enhed af krop og tanke (Hastrup, 2005).

### 6.3.7. FORTÆLLINGER = FAKTA?

En væsentlig pointe i forhold til metoden er, at hverken den talte eller den tavse viden kan anskues som 'fakta'. Fortællingerne er først og fremmest fortolkninger af fysiske, autoetnografiske, interpersonelle og kontekstuelle data, der hver for sig eller samlet kan bidrage til at kaste lys over aktørens oplevelse af at befinde sig i praksis. Det er ikke muligt, hverken for os som dialogpartnere eller for aktøren selv, at finde en privilegeret iagttagersposition, som omfatter 'den hele sandhed', ligesom det heller ikke er muligt at rangordne fortællingerne i forhold til hinanden – eksempelvis 'hvis min hjerterytme er stabil, betyder det nok, at jeg har det godt,

selv om jeg bange'. I dette tilfælde ville hjerterytmemålingerne netop anvendes som en sandhed, der betyder at egne følelser risikerer at blive afvist som sande, fordi vi påfører os selv en dims – en teknologi der fortolker hjerterytmen. De forskellige datakilder skal først og fremmest anskues som et kludetæppe af forskellige fortolkninger af fortællinger som, forhåbentlig, kan skabe bevidsthed om aktørens væren i verden.

## 6.4. FORELØBIGE RESULTATER

I løbet af 2013 og 2014 gennemførtes 11 testforløb. Fælles for testpersonerne var, at de alle oplevede en praksis under pres, og at de samtidig havde vanskeligt ved præcist at sætte fingeren på, hvornår og hvorfor de følte sig pressede. Testpersonerne var således ikke diagnosticeret stressramte, men en del af dem var, efter deres egen opfattelse, i risiko for at blive stressramte. Enkelte havde tidligere været stressramte. Alle havde de et ønske om at arbejde målrettet med at blive klogere på deres egen måde at forvalte energi og imødegå udfordringer i deres arbejdsliv. Hvert testforløb var af en uges varighed og bestod af en indledende samtale, en uges selvmonitorering med ESM og HRV-målinger samt en afsluttende dialog. De citater, vi vil præsentere i det efterfølgende, stammer fra de afsluttende dialoger, hvor vi i fællesskab med testpersonen reflekterer over data fra selvmonitorering. I vores præsentation af resultater fra testforløbene anvender vi persona form som formidlingsmæssigt greb (Nielsen 2011). At anvende denne formidlingsform indebærer en bearbejdning af dataen, hvor stykker af viden om testpersonerne oplevelser sammensættes til en karakter, en rolle eller en "maske" (Nielsen 2011). Dette betyder, at der trækkes på citater fra alle 11 forløb, men at citaterne samles og centrerer i 2 forskellige persona-beskrivelser, der alder-, job- og udfordringsmæssigt repræsenterer de testpersoner, vi har været i kontakt med. Fokus for vores bearbejdning af data og beskrivelsen af personaer har været at identificere og karakterisere hvordan OAS viser sig, og hvilke konsekvenser det opleves at have for testpersonen.

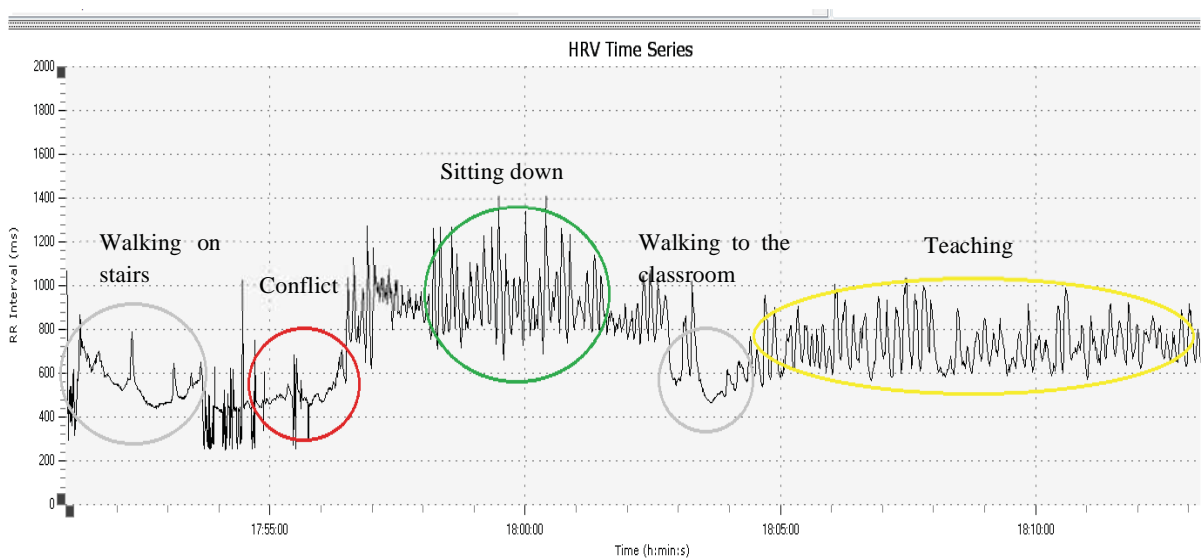
### 6.4.1. PERSONA 1: HANNE

Hanne er 58 år og uddannet lærer. Hun har arbejdet som lærer i 32 år, hvoraf de seneste 18 år har været på den samme skole. Her har hun blandt andet fungeret som tillidsrepræsentant. Hanne har en oplevelse af, at faget har ændret sig meget, siden hun startede som lærer. Der er blandt andet indført en mængde nye teknologier til at understøtte undervisningen, forældresamarbejdet og teamsamarbejdet med de øvrige lærere. Hanne oplever, at disse teknologier både bidrager til at skabe nye, positive muligheder, men samtidig er de med til at gøre arbejdstiden mere



undefinerbar; Man kan altid lige tjekke mails, intra etc. Blandt andet derfor bliver Hannes dage ofte lange. Hun har i perioder oplevet ulyst til at fortsætte som lærer, og har overvejet om hun skulle finde en anden karrierevej, men er alligevel blevet i jobbet.

Mange af de refleksioner Hanne gør sig gennem den opsamlende dialog, handler om sammenhængen mellem den oplevede mentale tilstand og kroppens reaktioner. I nedenstående ses et udsnit af Hannes HRV-måling fra testugen, hvor hun oplever en konfliktsituation.



Figur 6-5. Kroppens fortælling

Den lodrette X-akse repræsenterer tiden imellem hjertets slag (RR interval). Mindre variation er tegn på mere fysisk aktivitet - eller det kan være tegn på, at kroppen befinder sig i en stresslignende tilstand. Dvs. jo lavere placeret og jo fladere kurven er, jo mere er den indikator på fysisk aktivitet eller stress. Y-aksen viser tidspunktet. I dette tilfælde passede tiden dog ikke pga. en defekt i måleudstyret. Ovenstående målinger starter ca. 7 min. i 10 om formiddagen. Den første grå ring fra venstre viser HRV på et tidspunkt, hvor Hanne bevæger sig op ad trappen mod klasseværelset med en tung kasse med iPads. Den røde ring viser HRV i konfliktsituationen, som helt konkret bestod i, at flere elever var oppe at

skændes/slås foran klasseværelset, og Hanne måtte gribe fysisk ind og fjerne en af eleverne fra konfliktsituationen. Den grønne ring viser HRV på det tidspunkt, hvor Hanne og eleven har sat sig for at køle ned i en sofa. Den anden grå ring viser HRV, da de atter bevæger sig mod klasseværelset og den gule ring viser Hannes HRV, hvor hun underviser foran klassen. Hendes reaktion på denne visuelle fremstilling lød således: *“Det er faktisk rart at se hvor hurtigt min krop slapper af igen efter sådan en konflikt”,* og kort efter: *“Det overrasker mig lidt, at jeg ser ud til at være så afslappet, mens jeg underviser, for jeg er mange gange nødt til at bede eleverne om at være rolige og tie stille. Så det er jo godt, tænker jeg, at jeg alligevel ser ud til at være ret rolig og min hjerterytme ligger stabilt”.* I dialogen bruges indsigten fra konfliktsituationen som et springbræt til at tale om flere situationer, hvor selvmonitoreringen kan anvendes til at differentiere mellem fysiske og mentale reaktioner, og hvor denne skelnen netop synes at give stof til eftertanke for Hanne i forhold til hendes måde at møde konflikter i arbejdslivet. Et andet eksempel på dette er, at Hanne i testperioden skulle til et møde med sin leder, som hun frygtede var forbundet med store konflikter. Hendes mentale reaktioner op til mødet bar præg af at føle sig presset, have lav energi og generelt stor ulyst til at deltage i det pågældende møde. Efterfølgende viste de fysiske målinger, at hendes krop var overraskende meget i ro under selve mødet: *“Jeg var spændt på at se, hvordan min krop reagerede på, at jeg skulle konfrontere min leder med en problematik, jeg havde brug for at tale med ham om. Jeg blev overrasket over, at jeg var så rolig, og at der slet ikke var noget at se på min hjerterytme. Det er en problematik, der har naget mig længe, og det giver mig faktisk energi til at fortsætte ‘kampen’ med at få min leder til at forstå, hvordan jeg har det.”* For Hanne var det en øjenåbner at se, at hendes krop tilsyneladende ’mestrede’ situationerne i både undervisning og møde. Denne oplevelse fik hende efterfølgende til at reflektere over, at det som fyldte mest og tog mest energi var hendes forventningsangst, når hun kiggede ind i konfliktfyldte situationer og relationer. Hun brugte indsigten til at arbejde med sin forventningsangst i lignende konfliktsituationer, og hun så det som en anledning til at tage en snak med sin leder om de specifikke situationer, hvor hun oplevede et tilsvarende mentalt pres. Vores tolkning, især vurderet ud fra det sidste citat, er, at der for Hanne ligger en form for empowerment i de nye erkendelser – hun får ny energi og fornyet gejst på at forstå egne reaktioner og bringe dem i spil på en måde, så hun og lederen er i stand til at tilrettelægge Hannes arbejdsliv på en konstruktiv måde. Samtidig bidrog dét at differentiere mellem fysiske målinger og egenoplevelser med at bekræfte vores antagelse om, at den metodiske triangulering i *Ecological Momentary Storytelling* ER uhyre vigtig. I de føromtalte situationer ville der have været overhængende risiko for at tolke galt, hvis vi ikke netop havde haft adgang til såvel de fysiske målinger, de mentale egenoplevelser og Hannes egne refleksioner. I Hannes HRV-måling kunne turen op af trappen med de tunge iPads eksempelvis ligne en konfliktsituation, fordi kroppen er under pres. Det var imidlertid først efter trappeturen, at konflikten indtraf. Vi kan således ikke udelukkende vurdere tilstanden ud fra HRV-målingerne, ligesom et oplevet mentalt pres ikke nødvendigvis hænger sammen med at kroppen giver udtryk for at være

presset. Krop og egenoplevelser repræsenterer, ligesom i Hannes tilfælde, ofte forskellige fortællinger, som er med til at nuancere den enkeltes forståelse af, hvad der udfordrer og hvordan.

I slutningen af den opsamlende dialog forklarer Hanne om hendes oplevelse af at have deltaget i testforløbet: *"Det her burde alle have adgang til! Jeg 'mapper' mange af de aktiviteter, jeg laver – bruger min kalender rigtig meget. Her er det interessant for mig at se, hvordan min krop eksempelvis reagerer, når jeg arbejder om aftenen, går en tur i byen eller hvor træt min krop faktisk bliver, når min deadline endelig er overstået. Det er sikkert ikke alle der bruger sin kalender på den måde, jeg gør – men for dem tror jeg, at spørgeskemaer er en god hjælp til at huske hvad man har lavet...jeg har jo bare været vant til at gøre det lidt i forvejen ... sådan på min egen måde".* Hannes refleksion indikerer, for os at se, at metoden tjener især to formål for hende:

- Det bliver en elektronisk hukommelse, som hjælper hende til at fastholde indtryk og reaktioner, som ellers måske ville fortone sig i takt med, at nye indtryk og reaktioner fylder bevidstheden.
- Den giver hende adgang til den i udgangspunktet tavse viden om, hvordan hendes krop reagerer på forskellige aktiviteter i dagligdagen – herunder særligt hvordan hendes kropslige og mentale reaktioner hænger sammen eller producerer fortællinger som peger i hver sin retning.

#### 6.4.2. PERSONA 2: JENS

Jens er en 48-år høreapparaturbruger. Han bor sammen med sin kone og er far til to hjemmeboende børn. Han er uddannet tømrer, tidligere selvstændig og arbejder nu hos en større dansk entreprenørvirksomhed. Jens er mellemløber og hans opgaver spænder fra organisering af byggepladsen til kontor- og vagtopgaver. Han har ikke tidligere oplevet stress, men føler sig ind imellem presset i sit arbejdsliv. Hver 6. uge har han vagt-tjansen en uge ad gangen. Jens giver inden testforløbet udtryk for, at han føler sig under pres i disse uger. Han sover dårligt, da han har svært ved at høre vagttelefonen. Han har for nyligt fået en vibrationspude, der er forbundet til den, så han bliver vækket, når der kommer en sms-alarm, men det er ikke altid, at den virker. I løbet af dialogen, og på baggrund af datamaterialet, bliver det tydeligt, at den manglende mulighed for at kunne kontrollere situationen skaber frustration hos Jens – den påvirker hans mulighed for at bevare en god oplevelse af sammenhæng, idet kontrol-elementet, der kan sammenstilles med håndterbarhed (Antonovsky, A., 2000), svækkes.

I dialogen giver Jens udtryk for til tider at føle sig presset og udmattet uden altid at kunne identificere en årsag: *“...jeg kan somme tider være så møghamrende træt – ikke fysisk på den måde men sådan rent mentalt, og jeg forstår ikke altid hvorfor. Og det tror jeg er fordi kroppen har ageret i forskellige situationer uden at jeg egentlig selv har været bevidst om det”*. Den efterfølgende refleksion afspejler den bevidstgørelsesproces, der bliver igangsat, og som kan være med til, at han får en større forståelse af de faktorer, der er bestemmende for hans oplevelse af manglende energi og træthed: *“...det gav da selvfølgelig nogle tanker omkring mit medfødte hørehandicap; hvordan har min krop kunnet kompensere for det? (...) Det er ikke noget jeg ellers har tænkt nærmere over, men det har det her været med til...”*. Han fortsætter: *“Det at vi har skullet gå med den her hjerterytmemåler har fået mig til at tænke over, om andre af kroppens funktioner også fungerer anderledes som en slags kompensation for høretabet? Det kunne jeg godt forestille mig... Og så tænker jeg også, nu hvor vi har gået med den hjerterytmemåler... er hjertet også på overarbejde hele tiden?”*. Jens har særligt fokus på relationen mellem hans høretab og kroppens måde at kompensere på. Han forestiller sig, at hans krop kompenserer og reagerer i mange flere situationer, end han hidtil har forestillet sig – denne viden har været tavs for ham. Og han forestiller sig at denne kompenserer er årsag til den gennemgribende træthed, han oplever.

Jens giver udtryk for, at han ikke er vant til at tænke så meget over, hvordan han har det i forskellige arbejdsituationer, og at forløbet har hjulpet ham til at skabe dette metaperspektiv: *“Lige i starten syntes jeg, det var lidt underligt, men spændende, fordi du blev lige pludselig tvunget til at tage stilling til, hvordan har du det egentlig? Føler du ikke, du har overblik? Hvad er det egentlig for nogle situationer, du er i? Hvor mister du dit overblik? Og det synes jeg da er rigtig spændende - at give sig tid til selvransagelse, hvis man kan sige det på den måde. At blive opmærksom på sig selv. Hvordan går du egentlig og har det i din dagligdag? Altså hvad foretager du dig egentlig? Det kom lidt bag på mig”*.

Desuden får Jens identificeret flere situationer og aktiviteter i både privatliv og arbejdsliv, som har indflydelse på hans helhedsoplevelse af dagen samt hans energiniveau. I forbindelse med arbejdet er han ind imellem ude på større byggepladser, og i dialogen gav han udtryk for at: *“Det irriterede mig rigtig meget, at der kørte lastbiler og trucks rundt. Der har jeg rigtig svært ved at følge samtalen”*.

En anden aktivitet, Jens reflekterer over som energikrævende, er pauserne, hvor han sidder sammen med kollegerne i frokoststuen, selvom han ind imellem har lyst til at sidde for sig selv, da han har svært ved at høre de andre pga. mange mennesker og dårlig akustik. Han har fået et FM-system, der skal hjælpe ham til at høre bedre i sociale situationer, ved møder osv., men når der er mange mennesker, kan han ikke bruge det. Det er et dilemma for ham, da han også gerne vil være sammen med kollegerne i pauserne. Men det at sidde sammen med kollegerne i pauserne betyder,

at han efterfølgende skal have en pause på 5 – 10 minutter alene for at kunne klare resten af dagen.

Jens har desuden fokus på at anvende de indsamlede data til at se på, hvad der skaber energi i hans hverdag: *”Jeg kan bruge informationen til at se, hvor vigtigt det er for mig at have en meningsfuld opgave. Det der giver mening for mig giver mig energi, hvorimod opgaver, der ikke giver mening, tager min energi.”* Noget af det, Jens gav udtryk for at få med sig fra testforløbet, var en større bevidsthed omkring hvad det er, der giver ham energi, og hvad det er, der dræner ham. Det er når opgaverne giver mening for ham, at de tilfører ham energi, og med bevidstheden om dette har han mulighed for at lave en vurdering i forhold til de opgaver, han giver sig i lag med. Her vil han i fremtiden være bedre rustet til at lave en vurdering af, om det er en opgave, der vil give eller tappe energi – og dermed om det er en opgave, han bør sige ja til. Han får dermed større mulighed for at planlægge opgaver og skabe bedre balance i arbejdsdagen, end han har oplevet hidtil. Refleksionerne fra dialogen afspejler flere områder, som forløbet har bidraget til at sætte fokus på hos ham:

- Sammenhængen mellem høretab og mentale/fysiske tilstande.
- Bevidsthed om, hvad det er, der skaber mening i hans liv, samt hvorledes det at have en meningsfuld opgave er vigtigt for hans trivsel og energiniveau.
- Øget opmærksom på, hvordan han strukturerer sin hverdag, således at han får mere kontrol over og skaber balance i aktiviteter, der enten tapper eller giver energi.

## 6.5. KONKLUSION PÅ TESTFORLØB

En af vores arbejdshypoteser i udviklingen af metoden har været, at OAS kan mobilisere modstandskraft mod stressorer. At kunne få øje på oplevelsen af sammenhæng i sit liv, eller mangel på sammen, fordrer i første omgang en bevidsthed om egen praksis. Derfor har vi været særligt optagede af, om testpersonerne havde en oplevelse af at få tilvejebragt dette metaperspektiv, eller som et minimum oplevede at få et rum til at reflektere over sammenhænge i arbejdslivet. Som det fremgår af de foreløbige resultater, oplever vi, at der sker en udvikling fra subjekt-niveau, hvor testpersonen helt eller delvist er absorberet i sin egen praksis, henimod et fortolkende/evaluerende bevidsthedsniveau, hvor selvmonitoreringen muliggør at praksis bliver genstand for iagttagelse og refleksion.

I refleksioner over indrapporterede egenoplevelser og fysiske målinger synes der især at være tre typer af fornyet indsigt og metaperspektiv, som manifesterer sig hos testpersonerne under og efter testforløbet:

- Kategorisering af aktiviteter: Et metaperspektiv på, hvorledes bestemte aktiviteter og relationer enten koster eller bidrager med fornyet energi.
- Kroppens egne fortællinger: Indsigt i den i udgangspunktet tavse viden, som kroppen producerer, og som i sig selv kan producere fortællinger om trivsel eller mistrivsel.
- Sammenhæng mellem egenoplevelser og fysiske målinger: Indsigt i hvordan vores egenoplevelse og vores krop i nogle situationer kan producere forskellige fortællinger om vores måde at reagere på i vores daglige praksis

Det er vores grundantagelse, at indsigten i egen praksis på alle tre områder kan være første skridt hen imod at kunne passe bedre på sig selv, hvor man er særligt udsat, samt at kunne indarbejde nogle strategier, der kan hjælpe til øget kontrol for bedre at kunne håndtere vanskelige situationer og dermed reducere kroppens stressreaktioner.

Ny viden, som testforløbet har bidraget med i et forskningsperspektiv, kan på et overordnet plan præsenteres således:

- Øget indblik i hvor, hvornår og hvorfor oplevelser af stress forekommer hos henholdsvis lærere og erhvervsaktive hørehæmmede.
- På baggrund af testforløbet kan der arbejdes målrettet med at styrke OAS gennem de tre komponenter 'begribelighed' 'håndterbarhed' og 'meningsfuldhed'<sup>18</sup>, og dermed skabes en målrettet indsats i reduktionen af arbejdsrelateret stress.
- 

---

<sup>18</sup> En evaluerings- og analysestrategi har været at identificere udsagn, der vidner om refleksion og øget bevidsthed omkring de tre komponenter hver for sig. Her har vi identificeret bevægelse på de tre områder hos testdeltagerne, men ikke nødvendigvis samtlige områder hos samtlige deltagere. Dvs. nogle er blevet mere opmærksomme på, hvad der giver mening for dem i livet, mens andre er blevet mere bevidste om, hvad de kan håndtere i hverdagen etc.

### **6.5.1. SELVMONITORERING OG BEHANDLING – SAME, SAME ELLER DIFFERENT?**

Tilbage står spørgsmålet: Hvordan skal vi forstå metodens anvendelsesmuligheder? Er selvmonitorering en behandling? Eller er selvmonitorering og behandling af stress to forskellige ting? Er det en måde at diagnosticere stress? Lad det være sagt med det samme: Vi anskuer ikke metoden som en selvstændig måde til at kunne diagnosticere, hvorvidt den enkelte er stressramt eller ej. Der, hvor vi mener metoden har sin berettigelse, er på især to områder: Som en forebyggende indsats mod arbejdsrelateret stress og dernæst som et *led* i en behandling.

### **6.5.2. ECOLOGICAL MOMENTARY STORYTELLING SOM FOREBYGGENDE INDSATS**

For det første mener vi, metoden er anvendelig i en forebyggende indsats mod arbejdsrelateret stress. Som beskrevet indledningsvist er det en stor udfordring for mange potentielt stressramte at stoppe op i tide – at lytte til de fysiske og mentale signaler, inden det går galt. Når man producerer arbejdslivsfortællinger gennem Ecological Momentary Storytelling svarer det til at føre en elektronisk dagbog. Fortællinger er især anvendelige til at gå 'tilbage i tid' og kigge efter mønstre, trends og cyklusser i sine spontane her-og-nu reaktioner (Beal og Weiss, 2003), eksempelvis: "Når jeg indgår i X aktivitet, relation etc. ser det ud til at min reaktion overvejende er Y" eller "hver mandag ser det ud til jeg følger et bestemt mønster i mine handlinger, som afføder en bestemt reaktion hos mig".

Ved at kombinere metoderne og efterfølgende skabe rammerne for et dialogisk rum, hvor den enkelte kan reflektere over egne kropslige og mentale fortællinger, dannes et nuanceret billede – både for den enkelte men også for den leder som evt. måtte deltage i processen. Det giver en mulighed for at gribe fat i helt konkrete problemstillinger og søge en fælles løsning, inden de vokser sig uoverstigelige.

### **6.5.3. ECOLOGICAL MOMENTARY STORYTELLING SOM SUPPLEMENT TIL EKSISTERENDE BEHANDLINGSFORMER**

Som tidligere fremhævet kan vores hukommelse svigte os og bære præg af at være selektiv. Jo længere tid der går fra en bestemt begivenhed, des mere "hullet" bliver vores hukommelse omkring den (Stone m.fl., 1998).

Vores antagelse er, at Ecological Momentary Storytelling vil kunne yde et væsentligt bidrag i den forbindelse. Når en person allerede er sygemeldt pga. stress,

og de begivenheder og oplevelser, der ledte op til dette, ligger langt væk, kan man selvfølgelig sige, at løbet allerede er kørt i forhold til at monitorere i arbejdslivet. Dog mener vi, at monitorering mellem samtaler med eksempelvis en psykolog kunne udgøre et fælles fundament for at tale om den enkeltes tilstand med udgangspunkt i spontane her-og-nu reaktioner. Både behandleren og den stressramte ville sammen kunne se tilbage på den periode, der er forløbet mellem samtalerne og adressere spørgsmålet: Hvad har fyldt og hvorfor mon? Desuden vil Ecological Momentary Storytelling formentlig også være et frugtbart redskab, når vedkommende skal træde de første spæde skridt tilbage til arbejdslivet. Hvordan reagerer kroppen og psyken på at vende tilbage? Er der opstået nye udfordringer eller er der stadig problemstillinger, der minder om dem, vedkommende har oplevet tidligere. Frem for alt kan det være en måde at holde fast i reaktioner og synliggøre disse for sig selv og andre, således at kroppens signaler ikke overhøres.

#### **6.5.4. ECOLOGICAL MOMENTARY STORYTELLING I EN ORGANISATORISK KONTEKST**

Hele incitamentet til at udvikle Ecological Momentary Storytelling er det stigende problem omkring arbejdsrelateret stress. Derfor er det selvfølgelig relevant at reflektere over, hvad den organisatoriske kontekst byder på af udfordringer. Kaster vi et blik på den eksisterende forskning, ved vi meget lidt om de udfordringer selvmonitorering på en arbejdsplads kan afstedkomme - der er ganske enkelt skrevet meget lidt om det, og i den litteratur, der foreligger, er fokus overvejende på de tekniske muligheder og mindre på refleksioner over kontekstens betydning for teknologiens muligheder, begrænsninger og etiske implikationer. (Beal og Weiss, 2003; Stone m.fl., 1998)

Vi vil ikke i denne forbindelse kaste os ud i en lang udredning af, hvordan forskellige organisationsforståelser kan eller ikke kan spille sammen med selvmonitorering. Vores grundantagelse er ganske kort, at organisationer *er* en særlig kontekst i den forstand, at den ikke er en symmetrisk herredømmefri arena. Der er relationer på spil, der er magt på spil og en helt masse andre faktorer, som har betydning for den type intervention, som Ecological Momentary Storytelling vil være. Og hvad kan det så betyde? Hvad fordrer det af overvejelser?

Hvis vi spoler filmen tilbage så vi, at svaret på det salutogenetiske spørgsmål er, som beskrevet, det enkelte menneskes oplevelse af sammenhæng, som er en livslang læreproces, den enkelte selv må åbne døren til gennem refleksioner og livsfortællinger. I den forbindelse kunne en indvending lyde, om netop denne pointe ikke kan være medvirkende til individualisering og positivitetsfascisme i forhold til stressproblematikken? Med individualisering menes der i denne forbindelse dét, at ansvaret for, i hvilken udstrækning den enkelte klarer hverdagens stressorer, kan



risikere at havne hos den enkelte selv. Den enkelte 'ejer' så at sige den læreproces, der skal lede til oplevelsen af sammenhæng. Man vil kunne argumentere for, at *ansvaret* for, om oplevelsen af sammenhæng er stærk eller rigid, og om den enkelte er i stand til at handle konstruktivt på egen situation, således også alene hviler på den enkelte. Sagt anderledes: Hvis tingene bøvler, ophører med at give mening eller er u håndgribelige er det din egen skyld – og du kan i øvrigt bare gøre noget ved det. Dermed er der en risiko for at havne i det Rasmus Willig med henvisning til den franske sociolog Le Goff, kalder 'humanistisk barbari', hvor man indenfor bestemte domæner bruger de humanistiske begreber, men bruger dem til at skabe angst fordi mennesker med 'sorte tanker' må dukke nakken (Willig, 2009).

Spørgsmålet er, om vi med udgangspunkt i Antonovskys begrebsapparat bevæger os ud i det skrækszenarie, som Willig beskriver. Er oplevelsen af sammenhæng eksempelvis noget, der kun klæber til den enkelte og blokerer dette ansvar for italesættelsen af kritiske forhold i den enkeltes arbejdsliv, som ligger uden for den enkeltes ansvar? Vurderet ud fra Antonovskys egne ord har det enkelte menneske et medansvar i den forstand, at det alene er den enkelte, der kan vælge at forholde sig reflektivt til sit eget liv og dermed søge en større grad af sammenhæng. Dog betoner han flere steder i bogen "Helbredets mysterium" at oplevelsen af sammenhæng opstår i et dialektisk forhold mellem indre og ydre påvirkninger. Dermed hviler ansvaret for trivsel eller mistrivsel således heller ikke på den enkelte, men i et samarbejde mellem den enkelte og dennes omgivelser (Antonovsky, 2009).

Anvendelse af metoden i en organisatorisk sammenhæng bør indebære afklaringen af en række praktiske og ikke mindst etiske spørgsmål i den givne kontekst. Nogle af spørgsmålene kunne lyde:

- Hvordan undgår vi at individualisere stressproblematikken?
- Hvad er formålet med monitoreringen i den givne sammenhæng, og på hvis initiativ kan eller skal den gennemføres?
- Hvem skal have adgang til de pågældende data (individ, team, ledelse etc.)?
- Hvem 'ejer' data, og hvem bestemmer, hvad de skal bruges til?
- Hvordan forankres processen organisatorisk?
- Hvad skal der efterfølgende ske med dataene?
- Hvordan sikrer vi etisk forsvarlig anvendelse af mulighederne for at logge informationer?
- Hvordan arbejdes der med at skabe et dialogisk rum, hvor fortællinger tillidsfuldt kan deles - også i en større sammenhæng?

Alt efter hvordan metoden bringes i spil, og hvorledes den fornyede indsigt forvaltes, kan metoden tilvejebringe både åg og åbenbaring. Anvendes den ureflekteret og uetisk, er der risiko for havne i individualiseringsfælden, hvor hovedpinen opfattes og behandles som den enkeltes ansvar og problem – din hovedpine ER din hovedpine. Hvis den enkelte oven i købet selv har lokaliseret sit 'problem' gennem selvmonitorering, vil det kunne lægge op til en endnu større forventning om ansvarlig 'forholden sig'. Med andre ord en 'you fix it' holdning. Under de rette omstændigheder er vores grundantagelse dog, at metoden ligeledes vil kunne tilvejebringe åbenbaring i betydningen individuel såvel som kollektiv klarhed og indsigt, således at den enkeltes hovedpine også anskues og blotlægges som et symptom på fælles organisatoriske, relationsmæssige eller strukturelle problemstillinger. I dette tilfælde vil metoden kunne gøre både den talte som den tavse og i udgangspunktet private viden til genstand for fælles refleksion og problemløsning. Den vil kunne anvendes som udgangspunkt for dialoger mellem eksempelvis leder og medarbejder eller mellem kollegaer i teams - men det kræver uden tvivl tillid, mod, transparens og en omsorgsfuld hensigt fra alle involverede parter.

## **PART 2B**

# CHAPTER 7. EVALUATION OF ECOLOGICAL MOMENTARY STORYTELLING

During 2013 and 2014, a total of 6 persons with hearing loss – besides the two user-testers described in Chapter 5 and a number of normal hearing test persons including myself – completed a test week in which ecological momentary storytelling was applied in everyday work contexts. The data from the follow-up dialogues with the 6 hearing-impaired participants were analysed using grounded theory (also see Articles 3 and Article 4, chapter 8 and 9 for a further description of the analysis and the test participants). As many as 14 categories were found of which 3 focused on the technology and usability of the method. The process of analysing through different layers of coding led to a theoretical structure. This procedure concerned, on one hand, the method and on the other hand, the self reflections in everyday life. As a result the presentation of the core variables must initially be split into these two groups and dealt with separately. At this stage, it makes sense to address the three categories concerning the method in a discussion of the challenges and perspectives of implementing such a method in everyday contexts.

## 7.1. CATEGORIES DESCRIBING THE METHOD

The 3 categories that represent reflections on the method, technology, and usability are to be found in the table below in Figure 7-1. These categories have emerged through two levels of coding (see Appendix B: Analysis of the dialogues) Here, the remaining categories concerning ‘Role and identity’, ‘Control’ and ‘Biopsychosocial contexts’ are greyed out and dealt with in Articles 3 and 4 in this thesis. The 3 categories concerning the method are: 1. *The process of data-collection*, 2. *Data as an indicator for here-and-now experiences*, and 3. *Assistive perspectives of the method*. The categories are in the following chapter and are presented and supported by citations from the participant dialogues in order to broaden out the content of the categories.

<b>Meta-categories</b>				
<b>Categories</b>	<b>Method /technology /usability</b>	<b>Role and identity</b>	<b>Control</b>	<b>Biopsychosocial contexts</b>
	<i>1. The process of data-collection</i>	<i>4. The role of the self in relation to others</i>	<i>6. To take control in life</i>	<i>11. Biopsychosocial contexts related to the hearing</i>
	<i>2. Data as an indicator for here-and-now experiences</i>	<i>5. Self-perception</i>	<i>7. The relationship between feelings and control</i>	<i>12. Biopsychosocial contexts not directly related to the hearing</i>
	<i>3. Assistive perspectives of the method</i>		<i>8. Maintaining control in the presence of other people</i>	<i>13. The importance of meaningful activities</i>
			<i>9. Strategies as a means to maintain control</i>	<i>14. What provides energy and what causes fatigue?</i>
			<i>10. Dependency on assistive technologies</i>	

Figure 7-1: Table of categories based on a grounded theory analysis of data from the follow-up dialogues.

### 7.1.1. THE PROCESS OF DATA-COLLECTION

The main aspect of the challenges with the program installed on the mobile phone were overcome within the first two days of data-collection. This outcome indicated

that some of the problems had to do with getting comfortable with using the system: *'It took a little getting used to with all the equipment, as hearing-impaired people already carry around a whole lot [of technology]. It was kind of a stress factor for me – at least on the first day – and just figuring out how the technique responded, and what to do now if it behaves differently from what I expected or how I had been instructed?'* (male participant, 57 years old). But two of the eight participants did not overcome the challenges within the first two days and withdrew from the project due to technical problems: one male participant had problems interacting with the touch screen on the mobile phone as the skin on his fingertips was rough from hard work, and a female participant withdrew due to 'technical overload' as she had to carry around cochlear implants on each side of her head, an FM-system around her neck to enhance sound, two mobile phones (her own and the one used in the test), and HRV-equipment.

Some of the technical problems that the remaining participants experienced continued to cause problems throughout the entire test week. This included, for instance, the program crashing and the participants having to restart the device, clear all data from the program, and restart the program. This was mainly an issue in later versions of the program and caused one person to give up data-collection after only a couple of days. The program was examined, and the developers introduced emergency procedures so that the test week could be restarted after a couple of weeks, and she could complete the test. Nonetheless, there were problems and too much focus on technical issues. Some comments in the dialogue with this participant were as such: *'The latest update was quite bad'* and *'It is unsystematic when it crashes'* (female participant, 50 years old). Also, the participant expressed her concern that the technical issues might have affected her mood and some of her answers in this direction.

At the content level, there was, on a couple of occasions, some doubt about the meaning of different words like 'energy level' (is it mental or physical energy level?) and 'balance' (what does it mean to be in balance and how is that different from being engaged in a meaningful task?). Other questions were as follows: 'Does meaningful mean life in general?', 'Is noise both inner noise from tinnitus and outer noise from the surrounding environment?', and 'What is communication in this context. Specifically we heard that *"[t]here is a lot of noise and poor communication conditions. But I can still talk to the person opposite the table. So how do I interpret whether it is a problem or not?"*' (male participant, 57 years old).

There were also suggestions for developing and enhancing the content of the program. For example, some suggested an option for adding more text to help develop the reason for being in a certain mood: *'The thoughts colour your answers: are you in a good mood or...? I do not have the opportunity to describe briefly what*

*I think at that moment to substantiate the other answers'* (male participant, 57 years old).

### 7.1.2. DATA AS AN INDICATOR FOR HERE-AND-NOW EXPERIENCES

The second category reflecting on the method was the data as an indicator for experiences and activities. In the dialogue sessions, there were comments indicating that the use of the system became automatic after a couple of days of data logging. A participant uttered that *"after the first day, I just started doing it [logging experiences and activities] when the phone buzzed. I just did it without thinking about the answers. I didn't reflect on how I replied, if it was the correct answer and so on. I just logged how I felt at that particular moment"* (male participant, 57 years old). All participants were curious to see how the HRV-data reflected different activities. Meanwhile, one participant was curious to see if feelings of frustration would show in his HRV-data when he was engaged in a task, which in his opinion was a complete waste of time. Another participant was curious to find out whether a specific family situation, which she felt drained her energy completely, would be traceable in the HRV-data. There were also comments like *'it's a lot of fun looking at your HRV when you're at sleep'* (female participant, 56 years old). These comments indicate a feeling of great enthusiasm when looking into the HRV-data, but the log data also helped the participants to remember what happened at specific moments during the week: *'The image [of the log-data online] fits very well with how I experienced the various situations'* (female participant, 50 years old).

### 7.1.3. ASSISTIVE PERSPECTIVES OF THE METHOD

Finally, the third category of comments reflecting on the method was focused on future perspectives and the potential of ecological momentary storytelling for people with a hearing disability. In the dialogues, opinions on this were reflected on in comments like *'You will be able to help yourself much along the way'* (male participant, 60 years old) and *'I believe that such a system could help many people stop themselves and make them think about changing their behaviour [when heading into a period of stress or depression]'* (male participant, 57 years old). Furthermore, there were surprised comments like *'I think it is really exciting to take some time for introspection, to put it that way. How are you really in your daily life? What do you actually do [laughs out loud]? Yes, it really caught me'* (male participant, 60 years old) that emerged in the dialogues. In addition, the user test indicated enthusiasm about the potential of ecological momentary storytelling (Kappelgaard & Lund, 2013) as a method to gain awareness on everyday stressors.

## 7.2. DISCUSSION OF THE METHOD

The following model (Figure 2) is an attempt to explain how the above contexts affect each other and create an experience of either frustration or motivation. The three more or less round circles represent the stages where participants drop out, complete the test with mixed experiences of both frustration and motivation, or complete the test only experiencing motivation and flow.

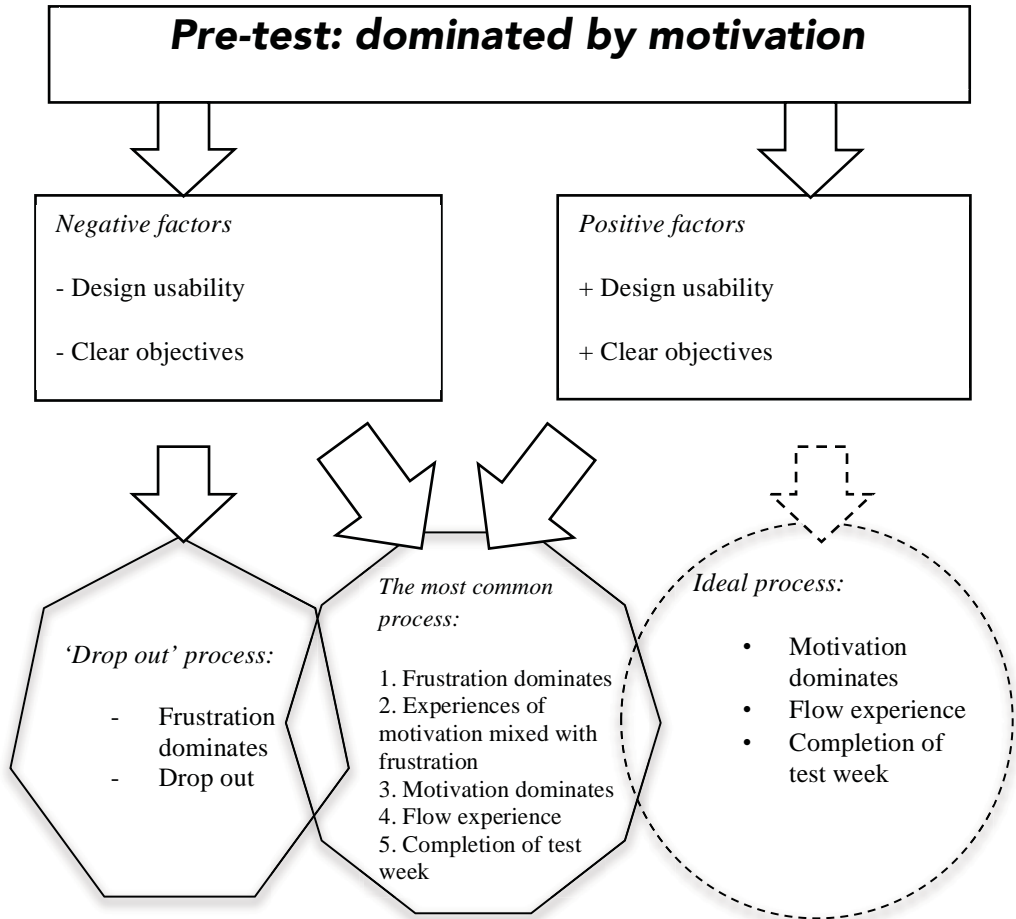


Figure 7-2: Model of factors that influence participants' decisions to drop out or complete the test week and the ideal process; none of the participants experienced this, but it is something to strive for in future iterations of the ESM-design.



As illustrated in the model (Figure 5-7), the participants were all initially motivated to join the project. Factors that determined their ability to complete the test as well as the level of frustration, motivation, and flow experienced during the test were as follows:

1. Design usability
2. A clear objective
3. The presence of mental and physical resources to complete the test.

The process during the week would *ideally* move from motivation as the dominating factor, which would allow the participant to reach a level of flow. This would minimize the stress level caused by the method. Flow was, according to the dialogues, only reached by one of the participants during the weeks of testing: *'...after the first day, I just started doing it [logging experiences and activities] when the phone buzzed. I just did it without thinking about the answers. I didn't reflect on how I replied, if it was the correct answer and so on. I just logged how I felt at that particular moment'* (male participant, 57 years old).

The actual implementation process throughout a test week was much more unstructured than the ideal process: All participants initially experienced a fairly high level of frustration for at least one day – most participants experienced a couple of days of frustration until they became familiar with the test system. Meanwhile, at least one participant reached a level of flow but not until after day 3. He seemed to stay at this level during the rest of the test week despite a couple of technical problems, which for a short while sent him back to a level of mixed experiences and then allowed him to reach flow again after the problem was solved. Most other participants stayed at the 'Motivation and frustration' and the 'Motivation dominates' levels. In addition, one participant went through with the test despite staying at the 'Frustration dominates' level.

The drop out process was simple. Both participants, who ended the test prematurely, started out at the level of frustration as dominating factor. But instead of moving towards 'flow', they stayed at this level until giving up after a couple of days. The 'drop out' level was reached on day 3 for both participants as well as for the participant who resumed the test week after having given up due to technical challenges (such as the system crashing spontaneously).

### 7.2.1.1 Stressor or motivator?

The technical aspects of the method have, on the other hand, also proven to be a motivational factor in itself to most of the participants. This motivation has primarily been related to the HRV-measurements based on curiosity towards the body's reactions in different situations.

Motivation based on curiosity as well as a wish to support research within the field of hearing disability seems to be present in two cases: when the method represents a hindrance causing continuous stress or failure to complete the test, and when the method works as a memory anchor causing only temporary or no stress. Only when the method represented a hindrance causing continuous stress or failure to complete the test was the motivation very often turned into frustration instead.

There is apparently no correlation between the technical skills that the participants possess and the ability to complete the test week. The salient point seems to be the technical challenges with the program crashing and having to be cleared of all data or reinstalled. None of the participants can be expected to do this several times a day during a test week.

Nevertheless, it seemed as if the more the participants saw a clear objective of applying the method, the more motivated they were, and the more they perceived the technical challenges as secondary factors. A desire to join the project for personal or general matters was therefore in most cases greater than the negative effects of the method.

One of the two persons who had to end the test after a couple of days because she felt that she was carrying too many technical devices around seemingly found it more difficult and was less motivated than another participant. This individual carried around the same number of technical devices. Her focus was on the technical challenges at the drop out, but her final comment in the e-mail she sent was *'On second thought I was too fast signing up for the test, but if it's very important, I will try to "stick it out".'* This participant was recently cochlear implanted and was getting used to both new devices. She was also still in some pain after the operation and was in a stressful work situation. In particular, she was a trainee at a company as a part of her education, and the relationship with her immediate superior was not going well. This story indicates that there has to be some degree of stability in the lives of the participants in order to be able to go through with the test.

As much as the method was a motivational factor to some, the above matters reveal part of the method as a potential stressor in itself – and even a hindrance. At least in the beginning of a test period, this method should be expected to cause an elevated experience of stress, while at the same time, the data-logging has shown to be

motivating and cause curiousness. It thusly supports the implementation and completion of the test week despite a level of technical challenges.

### **7.3. PERSPECTIVES OF THE METHOD**

A thorough test design focusing on usability at a technical level should be completed before the method (ecological momentary storytelling) is put into practice. After a process of testing, some of the obstacles could possibly be overcome by making a downloadable mobile application for the participants to download onto their own smart phones. This would reduce the challenges connected to carrying around too many devices.

With a few technical changes, the method has the potential to support the process of decreasing stress in organizational contexts provided that the usability aspect is addressed at both a technical and graphical level. The use of the HRV device in combination with the ESM (experience sampling method) is somewhat more challenging since the HRV used in this research project is not connected to an online profile like the ESM and hence has to be analysed separately. Other types of devices than the one used in this study may have more usability-friendly features, and a coupling of the two data sources is absolutely possible. Being able to connect the data from the HRV and the ESM online would provide a wider spectrum of possibilities. Combining data from both the body and the mind and connecting it to an online profile would create an immense body of memory anchors that can be used to understand one's own physical and mental reactions to stress better. In an online profile, data can also be analysed automatically to reveal actions, patterns, and tendencies that may lead to stress. The online profile could be used to suggest different possible ways of dealing with stressful situations to support a positive development away from stress at an individual level. But also, the organizational advantages of such a system are difficult to ignore as the data forms a direct link to the stressful situations and at the same time offers an opportunity to look at the data of several employees at the same time. One can then look at tendencies and address the challenges of stressful situations before they manifest in more permanent stress. This, of course, presupposes that there are some ethical guidelines to follow and some restraints. These limitations only make the data readable to HR-management (for example) at a general and not an individual level – except of course if the individual gives permission in order to get help from the organization to reduce stress.

## 7.4. CONCLUSION

Technical challenges with the ESM (experience sampling method) have caused experiences of nervousness, irritation, and even stress among some of the participants, which may have affected the answers in the log data. In three cases, the technical challenges led to termination of the data logging. In one of the three cases, the data logging was resumed after an iteration made by the developers of the log system that was installed on the mobile phone. Hereafter, a week of testing was completed – despite continuous technical challenges. The technical challenges and the process of becoming familiar and comfortable with the use of the system seemed to take a couple of days.

At the same time, the findings show that in most cases it was possible to integrate the system into everyday life. As such, the aim of logging data about experiences related to life contexts was successful. This presupposes that the ESM program does not crash and cause stress on a continuous level.

The following Part 3 of this thesis is the analysis of the data from the reflective dialogues that succeeded the participants' week of self-monitoring.

## **PART 3**

# **CHAPTER 8. ARTICLE 3:**

## **HOW TO BALANCE HEARING LOSS AND WORK LIFE – WHEN INDIVIDUAL AND ORGANIZATIONAL ACTION GO HAND IN HAND**

[Unpublished]

*By Katja Lund and Claus A. F. Rosenstand*

### **8.1. ABSTRACT**

Sick leave and early withdrawal from the labour market is more frequent among the hearing-impaired population than people with normal hearing. The focus of this study is to gain a deeper understanding of the determinants that lead to a fragile and a strong labour market attachment by investigating stressors and resistance builders in hearing-impaired employees during everyday life. An ecological momentary storytelling method was applied in order to investigate, on the one hand, the narratives related to the hearing loss, and on the other hand, the narratives related to work-life in order to reach an understanding of the research question: How is it possible for a hearing-impaired employee to keep up a strong narrative about self and at the same time make sure that the needs related to hearing loss are met? By applying the method, we also obtained information on everyday stressors in the lives of six hearing-impaired persons during a workweek. Data from follow-up dialogues was analysed using a grounded theory approach. Fourteen categories placed within four meta-categories were found grounded in the data. The findings showed a clear connection between experiences of stress, energy-draining activities, and feelings of loss of control. The combination of individual awareness on everyday work contexts and action based on this awareness are covered in this discussion. Also elucidated is organizational action to make good communication a common goal for the entire work team or organization. This combination is likely to promote inclusion of the individual, decrease stress, and at the same time, increase team performance.

## 8.2.

### 8.3. INTRODUCTION

A large number of studies have examined how hearing loss is connected to psychological, physiological, social, and environmental factors. Moreover, there is widespread evidence that hearing disability is linked to cognitive challenges like language processing speed, attention, memory, and dementia (Lunner et al., 2009; Lunner & Sundewall-Thoren, 2007; Rudner et al., 2008; Lin et al., 2011). Other related factors are stress, depression, fatigue, mood, loneliness, bullying, and violations (Brunnberg et al., 2008; V. T. Christensen, 2006; Clausen, 2003; Kramer, Kapteyn, & Houtgast, 2006; Nachtegaal, Smit, et al., 2009). In addition, psychosomatic and somatic disorders are linked to hearing loss in several studies (Nachtegaal et al., 2009; Erikson-Mangold & Carlsson 1991; Fellingner et al., 2007). At the same time, the work-related consequences of hearing loss can be early withdrawal from the labour market, a lower employment rate, fewer work hours (Clausen, 2003), poorer social ties with management and colleagues (V. T. Christensen, 2006; Clausen, 2003) and a higher degree of sick leave taken due to stress-related complaints including fatigue, strain, and burnout. The strongest risk factors for stress-related sick leave were – according to the study – hearing impairment, job-demand, and the requirement to recognize and distinguish between sounds (Kramer et al., 2006).

In the present study, we will examine the narratives of stress and stressors. We seek to avoid leaving out any contexts that may influence experiences of stress by applying a multimodal perspective. The multidimensional health paradigm is becoming increasingly predominant in relation to understanding the challenges hearing-impaired people stumble upon in their everyday lives. According to Stephens and Kramer (Stephens, D., & Kramer, 2010), working professionals worldwide have adapted an increasingly holistic approach to health and disability<sup>19</sup>. For example, it is necessary to include social, psychological, physiological, technical, environmental, and communicational factors that come into play in the lives of people with a hearing disability in a rehabilitation process. This understanding is far from new, but only in recent years has it been integrated into models that are used by professionals throughout processes of determining the degree of handicap or disability and the type of action needed in a rehabilitation process. The International Classification of Functioning and Disability is most prominently used by professionals in the rehabilitation process of hearing-impaired people (WHO, 2001). The present study draws on similar perspectives to a rehabilitation process, but the focus is on labour market attachment rather than on audiological enablement.

---

<sup>19</sup>

### **8.3.1. THE MULTIDIMENSIONAL HEALTH PERSPECTIVE**

Aaron Antonovsky, an Israeli-American professor in medical sociology, accepted a multidimensional understanding of health long before the introduction of the multidimensional health paradigm at the beginning of the millennium. Antonovsky had already discovered/developed the salutogenetic idea in 1970, which he later described as the continuum between good and bad health (Antonovsky, 1979) and where focus is on health and the potential to move towards good health on the continuum. This health perspective was dependent on SOC (sense of coherence). The greater the SOC a person would experience in life, the greater the resistance to stressors a person would possess, and the higher the quality of life in general. Three components – comprehensibility, manageability, and meaningfulness – constitute the overall SOC (Antonovsky, 2000). The salutogenetic idea and the SOC have been adopted in the present study as central to understanding the multidimensional health perspective and the ability to handle stressors. By accepting this understanding, the SOC also becomes a determinant for the way a hearing loss is handled and experienced. This means, for example, that two similar types of hearing loss may cause very different types of challenges depending on the individual's general SOC. The SOC is related to the general perception of life and the degree of robustness a person possesses, and it is conveyed through narratives of the self in relation to others and to different life contexts.

### **8.4. RESEARCH QUESTION**

*How is it possible for hearing-impaired employees to keep up a strong narrative about the self and at the same time make sure that the needs related to hearing loss are met?*

### **8.5. CONTRIBUTION**

The contribution of this study is an understanding of possible determinants for hearing-impaired employees to maintain a positive self-perception and at the same time uphold the ability to express and act on needs related to their hearing loss. This understanding is important in order to strengthen labour market attachment as well as decrease the risk of experiencing sick leave instances due to stress among the group.



## 8.6. METHOD

The present study was based on the dialogue sessions following a week of data collection with the *ecological momentary storytelling* method (Kappelgaard & Lund, 2013). The data from the dialogues was analysed using *grounded theory*, which is a research methodology where the basic idea is not to verify existing theories but to create an understanding of the situation as studied through the development of hypotheses, models, and theories grounded in the data (Glaser & Strauss, 1967).

A main goal of the intervention was for participants to develop a high degree of reflection on everyday life situations. This desired goal would give the participants themselves and the researcher insight into the participants' perception of their struggles and strategies to handle everyday stressors.

The researcher's role was to establish a relationship of trust with the participants and to ask curious questions about the subjects that came up during the dialogues.

### 8.6.1. PARTICIPANTS

Contact to the 48 hearing-impaired persons who volunteered in joining the project was established through the National Hearing Association in Denmark. The association informed their members about the opportunity to take part in the study, and interested members then contacted the project by e-mail. Eight participants were randomly picked from the group. Participant criteria was that there should be some degree of hearing loss present and that the person should be engaged in work if not for full hours then at least some days during the week. This standard was important because a focal point of the study was to examine the effect caused by a hearing loss in work situations as a part of daily life. The eight hearing-impaired participants were between ages 43 and 64. Two participants withdrew from the study after only a couple of days due to technical challenges, and therefore the participant age for the remaining six ended up being 50-64 years. The results from this study therefore indicate contexts of importance particularly among this group but may be significant to the entire group of people with hearing disabilities in the working age. Three men and three women with hearing loss were represented in the study. The six participants were engaged in the study one week each during 2013 and 2014.

Prior to the test week, the participants were asked to write as much as they liked about their hearing loss: type and degree of hearing loss, congenital or acquired hearing loss, impact on everyday life, etc. This information was used as background material for a qualified start-up process and follow-up dialogue. The participants were also asked to focus on a particular field of interest that they wanted to gain insight into during the test week. This could involve focusing on fatigue: *When do I feel energetic/tired? What may cause the energy level to rise/fall?* etc. Engaging the participants in this way created a sense of ownership among the participants. We thusly experienced a high level of enthusiasm and effort being put into the project during the test week.

## 8.7. TEST DESIGN

The method used for data collection was ecological momentary storytelling, which was developed to qualify work life stories and provide greater insight into work-related stress (Kappelgaard & Lund, 2013). The participants were contacted prior to the test week to receive information on practical implementation.

The test week had to be a normal week of work, and it had to include a weekend or at least a weekly day off work. It was necessary to get a full picture of both life at work, life at home, and preferably the impact of a weekend as well to be able to spot both the determinants for mental distress and robustness during everyday life.

A start up time was agreed upon, and the participants received a description of what to expect and what was expected from them during the test week on a daily basis. As much information as possible was sent beforehand in order to keep the startup as short and non-tiring for the participants as possible. The startup of the test week took place in the workplace of each participant. It was carried out by the researcher and took between 30 minutes and 60 minutes each.

Twice there were participants from the same workplace, so it was possible to startup two test runs at the same time. This was a practical move since the participants were geographically spread out in Denmark: both on the Peninsula of Jutland and the Island of Funen.

**Test startup.** The startup was mainly focused on introducing the technical part of ecological momentary storytelling: the HRV (heart rate variability) monitoring system. This was a small, almost weightless monitoring device with two electrodes attached to the middle and upper part of the torso, and the data-logging system, also

called the ESM (experience sampling method) (Shiffman et al., 2008) This was a program installed on a mobile phone similar to a downloadable application.



*Figure 8-1: In the picture on the left, the heart rate variability monitor used for the test is depicted. The picture in the middle shows the data-logging system downloaded onto a mobile phone and the screen where the participants were able to log energy levels, number of people present in the room, and mood at the moment of logging. The picture on the right shows options of taking a picture and recording a short audio file.*

The ESM had to be installed on a separate mobile phone and was not downloadable to other mobile phones, which meant that the participants had to carry an extra mobile phone around during the test week. The participants were expected to wear the HRV monitoring system for as much time as possible during the test week. They were informed to take it off when taking a shower and when engaged in activities that they did not wish to share information about. This could, for instance, be sleep. Even so, all six participants who completed the test decided to wear the system during sleep. The ESM system prompted the participants once every hour they were awake. A button could be pushed to turn the system off during sleep. Questions in the ESM-system were focused on these topics:

- Activities a person was involved in
- Mood
- Energy level
- Number of people in the room
- Communication (smooth/not smooth)

- Noise
- SOC (sense of coherence)

The participants also had the opportunity to do the following:

- Write additional text
- Take a photo
- Record audio

The options of adding text, or adding a visual or auditory ‘memory anchor’ was aimed at helping the participants to remember certain moments in time. This way, participants could address these moments and reflect on them during the following dialogue session.

### **8.7.1. ACCESS TO DATA**

Only the researcher and the participant had access to the ESM data during the test week. The HRV-data was not accessible online and was accessed neither by the researcher nor the participants until the dialogue session started. The ESM data was uploaded regularly to an online profile because the mobile phone was connected to a mobile network. The only time there seemed to be real challenges uploading data was when the participants were at sea.

The researcher did not access or analyse any data during the test week. Hence, the approach supported a reflective, self-discovering, phenomenological, and memory-evoking process in the participants’ minds. This process increases awareness on the contexts that influence the build up of everyday stressors, and it is essential in order to be able to act consciously to decrease the impact of everyday stressors (Kappelgaard & Lund, 2013). The participants were informed of this approach during their introduction to the method. Only in one case, the first ‘real’ participant after the user test that was completed in early 2013 (Kappelgaard & Lund, 2013), was the approach slightly different.

### **8.7.2. SHAPING THE DIALOGUE**

After the user test in early 2013 (Kappelgaard & Lund, 2013), we researchers were convinced that we should look at and analyse the data recorded during a test week in order to present patterns and tendencies to the participants and encourage

dialogue and reflection.<sup>20</sup> But having attempted this approach once, we realized that it invoked a sense of expectancy and hesitance rather than involvement and reflection among participants.

The first dialogue session after the user test was different from the following dialogue sessions in a number of ways. Our initial hypothesis was that we should involve a normally hearing colleague in the test in order to make it a common organizational project, to increase reflection, and to compare the data and the experiences of the hearing-impaired with the normally hearing employee. Consequently, the dialogue session was arranged so that both employees were present during the follow-up dialogue. After this first dialogue, it was clear to us that this approach was unsuitable if we wanted to invoke reflection and raise awareness in the hearing-impaired participants. An important conclusion from this first dialogue session was that the focus on stressors in the hearing-impaired employee might be suppressed as the normally hearing employee may have a different agenda. In this case, the technical challenges became more important to the normally hearing employee than the focus on everyday stressors. Therefore, the normally hearing participant kept turning the conversation towards the technical issues leaving only little room for the hearing-impaired colleague to express herself on stressors related to hearing.

In the second test week, we also looked at and analysed the data prior to the follow-up dialogue, but this time the processed material was thought to be a starting point for reflection to support the participant in her own raising of awareness and not a presentation of tendencies and patterns. Still, the processed material had the opposite effect as the participant seemed to rely more on the material than on her own ability to reflect.

Therefore, after this second follow-up dialogue, the decision that the researcher should not access the data prior to the dialogues was made in order to make reflections on data and conduct awareness raising on everyday contexts with a phenomenological co-creation between the researcher and the participant.

### **8.7.3. INDUCTIVE STUDY**

After 5 to 7 days of logging data, the researcher revisited the participants for a dialogue about the test week and to examine the data collected throughout the week.

---

<sup>20</sup> The transcribed dialogues as well as the initial data analyses are included in the appendix of the PhD-thesis by the author, Katja Lund, which is to be published in fall, 2015.

Each dialogue session lasted approximately an hour per participant and was recorded. Only one dialogue was not recorded as the participant did not feel comfortable with this, so notes were taken instead.

At the beginning of each dialogue session, the participant was asked to tell loosely about his/her thoughts about the test week, thoughts that stood out, challenges throughout the week, expectations to the dialogue session, etc.

After having ‘emptied out’ the initial reflections, both dialogue partners would turn to the online display of the log data and look for data to support or develop the participant’s initial reflections as well as look for tendencies and correlations between data entries.

The dialogue partners then looked at the HRV data to examine the correlation between physical reactions and mental experiences during the week.

Furthermore, deviations in HRV were investigated to identify the cause. The answers were sought for in the ESM data in combination with the participant’s memory of a specific moment or experiences with daily routines. In general, the deviations were merely signs of the participant having walked on stairs, ridden a bike, gone for a walk, etc. Notwithstanding, it increased the participants’ awareness of the correlations between body, mind, and environmental factors.

In the HRV, we also looked at sleep: deep sleep, broken sleep, sleep routines, and the relationship between deep/light/broken sleep on the daily routine and energy level during the day.

#### **8.7.4. HANDLING THE DATA**

The grounded theory analysis of this study developed through three levels: open coding, selective coding, and theoretical coding (Glaser & Strauss, 1967). The process of open coding was carried out through a rigorous review of the transcripts on sentence-by-sentence basis. Every incident that occurred was written down in a new document<sup>21</sup>. At the same time, comments were added in the margin of the document as possible correlations between incidents became clear to the researcher.

After going through the data from one dialogue session, the open codes were clustered into more abstract groups thus creating selective codes. Then a second

---

<sup>21</sup> All documents are included in the appendix of the PhD thesis by the author, Katja Lund, which is to be published fall 2015.

dialogue session was put through a rigorous review to identify the open codes and subsequently form the selective codes from that particular session. Next, a third dialogue was examined and so on until data from all the dialogues had been through a careful process of open and selective coding. Eventually, all the categories of selective codes from all dialogue sessions were compared and merged together forming 14 subcategories about the method and about reflections on the self (see Figure 8-2: Table of categories). In the following chapter, the categories concerning the ability to resist stressors are examined by drawing upon a large number of comments from the dialogue sessions. These represent general tendencies as well as individual experiences. The importance of individual experiences should not be neglected as each hearing-impaired person experiences hearing loss differently.

The third level of theoretical coding is contained in the final discussion of this article where a more abstract pattern emerges. This outcome occurs through a process of connecting patterns from the first two levels of coding with relevant theories.

The citations and comments drawn forward in the following analysis are translated into English by the author.

## 8.8. FINDINGS

Locating substantial codes in the data, and clustering these through the process of selective coding, formed 14 categories grounded in the data (see appendix B: Analysis of the dialogues). Three of these categories were related to the method as well as to technical and usability issues. The focus of the present study does not include an evaluation of the method nor of technological/usability perspectives, and the three categories related to these issues are not examined in this study. The meta-category “Method /technology/usability” and the related subcategories are therefore greyed out.

The remaining eleven categories were related to the *role and identity* of the participant himself/herself, *control* related to the hearing – not control understood as power – and reflections on *biopsychosocial contexts* of everyday life. These categories are examined in the following chapter. The four meta-categories and the fourteen categories are presented in the table below.

<b>Meta-categories</b>				
<b>Categories</b>	<i>Method /technology /usability</i>	<i>Role and identity</i>	<i>Control</i>	<i>Biopsychosocial contexts</i>
	<i>1. The process of data- collection</i>	<i>4. The role of the self in relation to others</i>	<i>6. To take control in life</i>	<i>11. Biopsychosocial contexts related to hearing</i>
	<i>2. Data as an indicator for here-and-now experiences</i>	<i>5. Self- perception</i>	<i>7. The relationship between feelings and control</i>	<i>12. Biopsychosocial contexts not directly related to hearing</i>
	<i>3. Assistive perspectives of the method</i>		<i>8. Maintaining control in the presence of others people</i>	<i>13. The importance of meaningful activities</i>
			<i>9. Strategies as a means to maintain control</i>	<i>14. What provides energy and what causes fatigue?</i>
			<i>10. Dependency on assistive technologies</i>	

Table 8-2: Table of categories over potential stressors when balancing hearing loss and work life.

There were 11 categories reflecting thoughts on the self in everyday life. These were related to the *role and identity* of the participant himself/herself, *control* and reflections on *biopsychosocial contexts* (see Table 8-2: Table of categories). Below, examples from the dialogues are drawn out in order to accentuate the presence and describe the content of the 11 categories. The citations below represent general categories since these, as a part of the grounded theory analysis, have been merged



based on several statements in the dialogues<sup>22</sup>. The citations help clarify the content of the categories.

### **8.8.1. ROLE AND IDENTITY: 1. THE ROLE OF THE SELF IN RELATION TO OTHERS**

The role of the self and reflections on identity was a recurring topic. The role of the self was often articulated in relation to other people. The work-related role was especially commented on: *‘I am to a large extent the person people ask for advice. I’ve been here for almost 25 years, so I have a different kind of knowledge and skill set than that which can be bought’* and *‘I’ve discovered that I’m really good at communicating and keeping things together’* (male participant, 60 years old). These positive narratives about self seem important in the process of self-evaluation in comparison with others.

Humour seems to be an important part of everyday life, particularly to the male participants: *‘Good-natured bullying. That’s what makes it a bit more fun, isn’t it. I get them back too [laughing]. It creates a kind of balance’* (male participant, 60 years old).

Also, honesty about hearing loss and the special needs related to this situation in work-life situations is emphasized by several of the participants as important to a good work environment. We could call this ‘hearing loss transparency’. Hearing loss transparency presupposes at the same time that the hearing-impaired employee himself/herself is aware of the terms and needs to be connected to the hearing loss, which comes with increased self-awareness.

Support and understanding from the management is something that seems to be valued by the participants, but the fact that management expresses appreciation for the hearing-impaired person as a valued employee seems to be of even greater importance. One participant had been close to falling ill with stress a couple of times. His comment on management noticing that he was on the edge of becoming ill was as follows: *‘[T]hey said, “We’d better talk to [the participant’s surname]”. I think that’s good!’* and *‘[T]he management says, “You have to do something about it because we want to keep you until you turn 65”’* (male participant, 60 years old).

These comments might not seem particularly positive, but the participant experienced it as very important and positive considering the situation he was in at

---

<sup>22</sup> The full analysis is to be found in the thesis by Katja Lund, which is to be published fall, 2015.

that specific time. He was feeling stressed, and he was relieved that somebody noticed it and helped him initiate change. One could say that management noticing how he was not well, taking action, and expressing an interest in keeping him as an employee, overruled the fact that the responsibility to bring down the workload seemed to be his alone.

Meanwhile, an uncertain relationship with management can cause insecurity and feelings of stress as one female participant expressed it: *‘I wonder how my body is affected by the bad work environment here’* (female participant, 56 years old). The same woman was in a meeting with her management, with whom she felt a negative relationship, and during the dialogue session, we discussed her feelings and the data related to it before and after the meeting. The data did not indicate that she was affected by the situation, but the important issue here is her reflection on how she reacts both mentally and physically. She found strength in knowing that there were no deviations in the data, which she interpreted as a sign of inner strength to help cope with difficult matters in the future.

The experience of having hearing loss in relation to people with no hearing loss is an issue: *‘Everyone can hear the phone but me’* (female participant, 50 years old) and *‘Yes, it’s hard [living with hearing loss], and she [the wife] is also getting tired of it’* (male participant, 60 years old). In addition, the comparison of the participant’s own hearing loss with the hearing loss of other people is present in the dialogues: *‘People who can’t do anything about it are worse off than me’* and *‘I imagine that [name of colleague with a more severe case of hearing loss] gets tired much sooner than I do’* (male participant, 57 years old). The comparison of the self with others, both better and worse off than oneself, seems important to a major segment of the participants in the process of structuring a narrative about the self.

Also, the topic of ‘isolation’ became relevant as an issue related to role and identity. A 56-year-old female participant during the test week had become aware of the fact that she was alone most of the time as one of the ESM questions was focused on the number of people in the room. She reflected on this during the dialogue session telling the researcher that she used to live in a small townhouse in an area where people knew each other. She also used to have a job, which involved a good deal of communication with other people. Her situation at the time of the test had changed: She now lived alone in a one-room apartment in an apartment building with much less contact with her neighbours. And she worked as a researcher spending most of her time doing research alone. What she had not been aware of was she had gradually become more and more isolated. During the dialogue, she reflected on her options for changing this situation. After a couple of years of working in research, her plan had been to return to a more practically founded communication position. But during the test week, she had realised that doing research actually suited her well as it both challenged her intellectually and was perfect in order to cope with her hearing loss. This is because she did not have to communicate much throughout

the workday. Even so, the possibility of moving back to the small townhouse area became a consideration for her. She realised that she had missed a sense of unity among the people living there, and she made a decision to contact some of these people in the near future.

### 8.8.2. ROLE AND IDENTITY: 2. SELF-PERCEPTION

There was a general focus on the ability to manage everyday situations among the participants. Several of the participants expressed a perception of themselves as generally positive: *'Generally, I think I'm in a fairly good mood, generally!'* (female participant, 50 years old). Nevertheless, several of the participants during their work lives had experienced shorter or longer periods of stress-related sick leave. Here Antonovsky's salutogenetic idea comes into action, for the individuals experience different degrees of the sense of coherence in different periods of their lives. During the participant tests, there seemed to be a fairly high level of the sense of coherence among the participants. But the sense of coherence, measured as 'balance', 'overview', and 'meaningfulness' in the mobile ESM (experience sampling method), still seemed to be affected negatively by stressful situations like attending a course, poor listening conditions, missing a daily nap, or having an argument<sup>23</sup>.

### 8.8.3. CONTROL: 1. TO TAKE CONTROL IN LIFE

Reflections on control as a theme emerged in the dialogues. A participant had experienced the overcoming of a serious heart disease by taking control over his body through healthy living and getting fit. After having overcome heart disease, he was struck by severe tinnitus, and he felt frustrated: *'I felt that it couldn't be right... but I guess it just had to be that way'* (male participant, 57 years old). Feelings of frustration and of being defeated are, in this case, related to a loss of control as he felt he had no option to act to change the situation. He had already changed his lifestyle to overcome the heart disease, but he could not do anything to make his hearing loss, and especially the tinnitus, go away.

---

<sup>23</sup> The experience of the sense of coherence and other data from the ESM during the participant test weeks have been analysed quantitatively in order to qualify the findings from the grounded theory analysis presented in this paper. The quantitative data analysis is to be found in the PhD thesis by Katja Lund, which is to be published fall 2015.

Control related to hearing issues can also be a way of minimizing the impact of hearing loss. One could say that integrated hearing strategies are tools that can be activated in order to stay in control in everyday situations. This idea is also indicated by Hallberg and Carlsson in their study on strategies for managing a hearing impairment (Hallberg & Carlsson, 1991). One of the participants during the dialogue was reflecting on small strategic adjustments that could help her get through the workday and experience less fatigue. She considered arriving at the office an hour earlier than her colleagues in order to be able to leave an hour earlier. The reason for making this small change in her daily routine was that she would then have an hour of peace and quiet to start up her daily routine. She also experienced massive fatigue after lunch, and by making this change, she could return home after lunch instead to have a nap before the rest of the family arrived home in the afternoon.

#### **8.8.4. CONTROL: 2. THE RELATIONSHIP BETWEEN FEELINGS AND CONTROL**

Frustration and anxiety are strong feelings that are expressed in the dialogues. These feelings are mainly present when the participants experience loss of control. One participant expressed anxiety because his daily routine was broken: normally he would have no problem sleeping, but one night, he was on duty and he had the watch telephone in case one of the machines at work broke down during the night. This would not have been a problem either if it were not for his wife being away on that particular night: *‘[M]y wife was away, so I was home alone. Normally, she’s there. However, this time she wasn’t’*. He realised that his wife was his safety net because she would hear the phone if he did not, and her being away meant that he hardly slept all night: *‘[I]t is so deeply integrated in me. I’m afraid I don’t hear it. So I slept really badly [...] I’m nervous that it’ll ring. I wake up to make sure there’s been no call. Then I can sleep on. It can be very stressful.’* However, he obtained an alarm pillow, which would shake in case the watch phone went off: *‘[A]fter I got this alarm pillow last year, it has helped a lot.’* One time he experienced it not working, and after that, he has not trusted it fully: *“[A]t one point it failed. That was when it was new because it was broken. It had a defect from the beginning. How could I know? It was the first one I ever had’* (male participant, 60 years old). This also shows frustration with the fact that he had to rely on a technique and not be in charge – or in control – of himself.

A woman felt stressed and anxious before attending a course: *‘I felt a bit more stressed. That’s because I’m used to thinking, Will you be able to understand what is being said at the course or will you be completely lost? My experience is that sometimes I would have been better off staying at home. So I think I make myself tense before attending such a course’* (female participant, 64 years old). Here,

anticipation anxiety is at play causing negative feelings and experiences of stress. Several of the participants also mentioned meetings with more than one person or two persons as problematic in causing anticipation anxiety. Several of the examples above also affected the person's ability to do his or her job properly. Indeed, attending a meeting or a course might be a part of what is expected from the employee and management not knowing about the difficulties that the employee experiences. In the example above, the woman has been at the same workplace for over 20 years without management even knowing anything about her challenges.

Frustration based on an unsolvable dilemma is the issue in the following example where a man is trying to control his tinnitus. In this case, it is both the tinnitus and the hearing loss that causes problems: *'[T]urning up the volume of my hearing aids does not help me hear better... it just creates a lot more noise. But it makes my tinnitus go away'* (male participant, 57 years old). The dilemma arises when he tries to solve the problem, and it leads to another type of problem. This then leaves him with no real control over the situation.

### **8.8.5. CONTROL: 3. MAINTAINING CONTROL IN THE PRESENCE OF OTHER PEOPLE**

The strategies chosen in different situations seem to some extent to be dependent on the presence of other people: *'When I'm alone I sometimes sit down and relax and put my feet up on a chair'* (male participant, 60 years old). One of the participants expressed the need for a break alone after the breaks with his colleagues: *'It's not a relaxed break ... I sometimes need a time out. Then I withdraw, breathe deeply and try to relax my thoughts. And then I'm ready again'* (male participant, 57 years old). The official breaks constituted the most difficult and challenging situations throughout the workday because of a massive noise level and a lot of communication. Several of the participants described the lunchrooms at their workplaces as terrible acoustic spaces. To them, official breaks are some of the most challenging situations they are engaged in during a workday. The need to relax is also present after work: *'I don't always wear my hearing aids in the evenings because my head just needs to relax'* (male participant, 57 years old). And the presence of other people is also an issue in the home context: *'I like to sit alone when I come home. If the routine is broken it affects my mood'* (female participant, 50 years old). A routine has to do with predictability, which is lost when the routine is broken. And predictability has to do with being in control of what is going on. When the routine is broken, it then causes loss of control to a degree.

#### **8.8.6. CONTROL: 4. STRATEGIES AS A MEANS TO MAINTAIN CONTROL**

Several of the strategies that are described in the dialogues are strategies connected to the act of communicating: *‘It’s amazing how much it helps to look at somebody. Because even though I’m wearing the hearing aids and walking right next to somebody, I don’t always hear what they say [...] despite the fact that the hearing aids have become better – significantly better – over the years, I still would like to look at people’* (male participant, 60 years old). We will return to the issue of technical aids in a moment. Another communication strategy is focused on those with hearing problems informing colleagues about their hearing loss, their needs, their technical devices, etc. All the participants have one thing in common: they and their colleagues know about the hearing loss. The level at which the participants inform their colleagues about needs related to hearing loss is very different though. One person has been through a long process of shifting job positions since his hearing became worse some years ago. He has now chosen his job based on knowledge about the best auditive environment for him, and all of his colleagues have been informed about his situation. Another participant has had his job and his hearing loss for many years. The challenges with hearing are known to all of his colleagues, and they often joke about it: *‘Good-hearted humour is fun. They [his colleagues] sometimes find it irritating, because when I have my streamer<sup>24</sup>, I can hear everything they say [laughs]’* (male participant, 60 years old). Other participants seem to think that they have to manage the difficult listening situations themselves without burdening others with their problems. Meetings, breaks, and courses become extremely challenging as they get no help from their colleagues, who are not aware of the challenges their hearing-impaired colleague experiences. Also, the missing information becomes a greater problem if the fellow workers do not know the reason for the hearing-impaired colleague not being properly informed. Hearing loss transparency is key in this matter.

#### **8.8.7. CONTROL: 5. DEPENDENCY ON ASSISTIVE TECHNOLOGIES**

The nuisances of tinnitus can to some extent be controlled through the use of hearing aids as the sound can be amplified in the exact frequency of the tinnitus. In relation to experiencing a sudden tinnitus attack, one of the participants uttered, *‘I*

---

<sup>24</sup> When hearing aids are linked to a streamer, most audio sources can be transmitted through the streamer to the hearing aids using a wireless Bluetooth connection or a mini jack cable (<http://www.oticon.com/products/wireless-accessories/connectline-for-children/streamer-pro.aspx>).

*either take off my hearing aids if I'm wearing them, or I put them on if I'm not wearing them, and then I turn up the sound and it [the tinnitus sound] disappears fairly quickly'* (male participant, 57 years old). In many cases, assistive technologies offer an option to act in order to improve listening and communication situations in the lives of hearing-impaired people. However, they might also create a dependency on a technology, which sometimes fails to work, breaks, or is complicated to operate. Thus, technological aids, as a compensational option, become double edged because they create potential feelings of more control, when they increase control in a listening/communication situation, but also less control when they do not work as intended. Dependency on technical aids evokes both feelings of gratefulness and frustration among the participants. The frustration comes from having to rely on these technical aids and for having to adjust to the different types of devices that might help. These devices simply cannot be expected to work miracles. Yet the other feeling is gratefulness because of the improvement of the auditive function, which most people with hearing loss eventually experience: *'I got this streamer ... I forgot it [...] and my phone has been ringing all day [...] then it's really difficult to hear'* (male participant, 60 years old). According to Hallberg et al. (Hallberg & Carlsson, 1991) technical aids form a category of their own as they can be placed within neither the realm of 'controlling' nor 'avoiding the social scene'. In the present study, the use of technical aids is perceived as a strategy to increase control. This is because the degree of use has to do with the acceptance of one's own needs and hence the choice of using assistive technologies, such as an FM-system<sup>25</sup> or a streamer, forms a part of a larger strategy for improving listening situations.

#### **8.8.8. BIOPSYCHOSOCIAL CONTEXTS: 1. BIOPSYCHOSOCIAL CONTEXTS RELATED TO HEARING**

The main part of the dialogues was focused on reflections on the biopsychosocial contexts of everyday life. Within the biopsychosocial contexts, four subcategories are identified: the biopsychosocial contexts related to hearing, the biopsychosocial contexts not related to hearing, the importance of meaningful activities, and the management of energy based on activity. All four subcategories are closely related to each other and often overlap.

---

<sup>25</sup> An FM-system is a transmitter microphone, which uses radio waves to send speech signals to a FM receiver integrated into the hearing aids ([http://www.phonak.com/com/b2c/en/products/fm/what\\_is\\_fm.html](http://www.phonak.com/com/b2c/en/products/fm/what_is_fm.html)).

The first subject within the subcategory of biopsychosocial contexts related to hearing is the relationship between tinnitus and fatigue. There are several examples from the dialogues illustrating experiences of tinnitus causing fatigue: *‘I am well aware of the fact that it is the tinnitus that exhausts me. I really believe that. And if the tinnitus becomes too overwhelming then my energy simply just disappears’* and *‘I have no doubt – it’s what profoundly irritates me and I bet it’s also what takes my energy ... because of the constant whistling. You can’t help thinking about it, even if you have a lot of other things to think about ... then you turn up the volume on the hearing aids to take more sounds in ... but then you also get a lot of other damn noise’* (male participant, 57 years old). This participant emphasizes the connection between tinnitus and fatigue on several occasions throughout the dialogue – to him his tinnitus is the main cause of his fatigue.

Increased awareness of the hearing loss in relation to other bodily functions is also an important issue in the dialogues. All participants reflect to some extent on this topic – both the issue of the physical body being affected by the hearing disability and the other senses compensating for the hearing: *‘I have observed that I often see things before other people do – with my vision. I imagine that this is a compensation for my hearing loss [...] and I’m thinking that maybe the internal organs are affected as well ... do they also compensate in some way? The fact that we had to wear this heart rate monitor has got me thinking about whether other body functions also work differently as a kind of compensation for the hearing loss? I could well imagine’* (male participant, 57 years old).

The following row of thoughts is interesting as it shows the level of reflection and how one thought leads to another during the dialogue situation. The participant is reflecting on whether his physical body reacts to sounds and stressors without him being aware of it and what these subtle reactions mean in a greater perspective: *‘I have a feeling that I’m affected by some things [...] that the body absorbs and reacts to. Because I can sometimes be so extremely tired – not physically but mentally... and I do not always understand why. I think that’s because the body has reacted in situations that I wasn’t really aware of [...] and then I think: now that we’ve been wearing that heart rate monitor... is my heart also working overtime?’* Knowing that there is a connection between hearing loss and somatic disorders, this row of thoughts is fairly logical and sensible. But to the participant at that moment, it seemed to be a completely new insight. This then gave him a new understanding of the different biopsychosocial contexts in his everyday life. He finishes his line of thoughts by saying, *‘I would like to know if the heart is working overtime and if the body is in a state of stress all the time.’* Raising awareness of the contexts that might lead to stress is a step towards being able to act on it and take control in life (Kappelgaard & Lund, 2013), and here a high level of reflection helps the participant towards this increased awareness. An overlap here is the relationship between hearing loss and fatigue as fatigue is understood to be a bi-product of the bodily reactions: *‘It often happens that I hear a sound coming from my left, because*



*I've got my cochlear implant on my left hand side. But then the car, or whatever makes the noise, comes from the right, and that gets really tiring. I think my brain might be working overtime in this context'* (male participant, 57 years old). The problem with localizing the sound creates confusion and a physical tension, which affects his mental resources and causes fatigue.

The connection between noise, hearing loss, and communication is a problem to several of the participants. One participant describes a situation where he has to communicate with his colleagues outdoors while trucks are driving in the same area. He feels irritated when he is not able to follow a conversation because of the noisy environment. He has integrated strategies to avoid too much noise, but sometimes he is not in a position to practice his strategies: *'Usually when I am up in the lab, I turn off my hearing aids because there is so much noise up there. But I was on duty, so I could not turn them off. It bothered me'* (male participant, 60 years old). Another participant mentions the breaks where he should be relaxing with his colleagues. He experiences sitting in the lunchroom not being able to hear anything and not being able to communicate, and he feels affected by it: *'[I]f suddenly someone says something to me at the other end of the table ... I can feel that it affects me. I don't think I feel stressed but it affects me to some degree... [...] I can't hear what is being said or whether it is addressed to me, and then you feel bad, right. And I know in advance that even if I ask again, then I still could not hear it if the listening conditions are miserable. So I give up in advance because experience tells me that I would not hear it anyway. [...] Yes, I experience it daily'* (male participant, 57 years old). This is a good example of why the vocabulary needs to be diverse when describing the situation people with hearing disabilities are in, which in some cases leads to sick leave due to mental distress. The word 'stress' does not cover the experience this participant has when trying to communicate in the lunchroom. The feelings are much more diverse and difficult to frame and put into words. It is a feeling of being affected in some way, feeling bad, and giving up in advance. These feelings are not 'just' the sympathetic nervous system reacting to an incoming stressor and leaving the person in a fight or flight position. Instead, these feelings might affect self-perception and self-esteem negatively at a more general and fundamental level, resulting in negative narratives about the self as negative patterns occur.

The participants all seem to reflect on fatigue and activities that cause this as well as activities that provide more energy. Issues that are discussed are energy level and connection to the time of the day. The log data and the HRV data was in all the participant dialogue sessions used to get some kind of understanding of the patterns reflecting correlations between the time of the day, the type of activities, and the energy level. The participants wanted to understand the reason why they experienced fatigue at specific times of the day and the connection with the type of activities they were involved in. This way, they hoped to become able to navigate through a day based on an understanding of how certain activities affect the energy

level. But also, reflections on general strategies to gain more energy during the day are present in several of the dialogues. One woman was particularly focused on this issue mentioning several fatigue-causing and energy-providing situations that she had experienced. She mentions fatigue as a feeling of having to perform – both socially with friends and family and at work: *‘[Y]ou kind of strain yourself’* and *‘Normally, you can’t just get out of the situations that cause fatigue’* (female participant, 50 years old). She mentions communication as the main cause of fatigue and socializing with friends and family as exhausting. She explains how she experiences extreme fatigue and mood swings, which often last for a long time – even days – after having been on a family visit. She never really understood the reason for this, and it leads her to reflect on the period of time a negative experience ‘stays in the body’ and how the different values in the log data affect each other during the dialogue. Here, it is not clear if the negative experience is caused by difficulties communicating because of noise, many people talking at the same time, etc., or if it is due to disagreements or other things that might cause a negative experience.

The last subject within the category of biopsychosocial contexts related to hearing is the increased awareness of contexts that affect the ability to hear or the other way around: contexts that are affected by the hearing disability. An example of the latter is expressed in the following comment: *‘I had some thoughts about my congenital hearing impairment... how has my body been able to compensate for it in other ways than if I’d had a normal hearing? I haven’t really thought about that before, but this [the test week] made me wonder: have I used my body in a different way to compensate for the hearing loss? I’m sure that I have’* (male participant, 57 years old). Contexts affecting the ability to hear are mainly focused on noise. One participant expresses an increased awareness of his sensitivity to daily noise: *‘I think that I’m probably more sensitive to extraneous noise ... the daily noise ... than I thought I was. I can’t listen to music if I need to have a conversation with someone. It really bothers me more than I thought it did. I have become aware of that’* (male participant, 60 years).

### **8.8.9. BIOPSYCHOSOCIAL CONTEXTS: 2. BIOPSYCHOSOCIAL CONTEXTS NOT DIRECTLY RELATED TO THE HEARING**

Generally, the participants are curious and show great interest in understanding the connections among here-and-now experiences, the nature of the situation, and the physical reactions of the body. All of the participants are curious to see what the HRV measurements can reveal about the correlation between what is experienced and how the body reacts as one of the participants notes: *‘[T]his is actually interesting. And it confirms some things I suspected’* (male participant, 60 years

old). This curiosity becomes explicit in reflections during the dialogue sessions on how the body reacts to being anxious prior to a meeting, to lack of sleep, to exercise, etc. One subject that was taken up by several of the participants was meaningfulness – how meaningful activities affect the body and the energy level. Reflections on how certain activities affect energy levels fall within the category of ‘biopsychosocial contexts not directly related to the hearing’ even though there may be a stronger link between energy level and hearing loss than this indicates. The correlation between activities and energy level will be described when dealing with contexts that provide energy and cause fatigue below.

Also, as a part of the ‘biopsychosocial contexts not directly related to the hearing’, an increased focus on the self is articulated by several of the participants who express surprise with, interest in, and a positive attitude toward a newly gained consciousness: *‘In the beginning I thought it was a little strange but exciting because I was suddenly forced to evaluate how I felt: “Do you feel you can manage things? What kind of situations are you engaged in? Why do you lose your ability to manage things? What bothers you?” I think it is exciting to spend some time on introspection ... becoming more aware of oneself [...]. It really caught me!’* (male participant, 60 years old). The increased focus on the self is based on reflections about how different aspects of life are connected to each other: How does a situation affect the way a person thinks and experiences things? How does the body react in certain situations? What causes feelings of loss of control? Etc.

#### **8.8.10. BIOPSYCHOSOCIAL CONTEXTS: 3. THE IMPORTANCE OF MEANINGFUL ACTIVITIES**

The importance of meaningful activities has been mentioned in connection with the activities that provide energy and was expressed as important to three of the six participants.

A woman talks about shopping as an activity, which is important to her because it gives her energy. It is not shopping as a goal in itself that is the most important part of the activity. It is the fact that she is the one setting the pace and also that she does not have to put too much thought and energy into the activity. On the contrary, she experiences how *‘It provides energy if you don’t have to deal with anything’* (female participant, 50 years old). Nonetheless, she puts great effort into making it clear that the activity has to make sense to her somehow – activities have to be meaningful to provide energy. In relation to this, shopping to her is a good activity since she does not have to *‘deal with anything’*, but it can be a meaningful activity with a purpose.

### 8.8.11. BIOPSYCHOSOCIAL CONTEXTS: 4. WHAT PROVIDES ENERGY AND WHAT CAUSES FATIGUE

The subcategory of energy level and how it is affected by certain activities, as well as the experience of increasing fatigue at certain times of the day, are present in several of the dialogues. One woman is particularly focused on the different activities she is involved in and the impact the activities have on her energy level. That she has to remember many things during the day causes fatigue – this is an issue also mentioned by several of the participants. She also mentions that she experiences extreme fatigue at specific times every day – especially after lunch. At the same time, she is aware of which activities provide energy during a day. Here, she mentions having a nap, which is also crucial to one of the male participants. She moves on to talking about outdoor activities and nature as something that provides energy and a good mood. (Outdoor activities and the buildup of energy are mentioned as important to four of the six participants.) She then reflects on the associations related to an activity and describes how the act of drinking tea or coffee is associated with relaxation: *‘I find energy in a cup of tea or coffee’* (female participant, 50 years old). She can also bring energy to the surface at a more spontaneous level when she spends time with her children. This energy arises from happiness and love as she expresses it.

## 8.9. SUMMING UP: TOPICS FOR DIALOGUE AND DISCUSSION WITHIN THE ORGANIZATION

*Topics for dialogue within the organization: Role and identity*

- **Work-related narratives:** What is the work-related narrative the hearing-impaired employee tells about him-/herself? What makes it a strong/weak narrative? What are the narratives that the colleagues tell about the hearing-impaired employee?
- **Humor:** How is the general tone and social/psychological work environment at the workplace?
- **Hearing -loss transparency:** Do the colleagues know what it means to have hearing loss? Do they know what the terms and needs related to this condition are?
- **Self-awareness:** Does the hearing-impaired employee him-/herself know what the terms and needs related to hearing loss are?

- **Management role:** What is the attitude towards the fact that the employee has hearing loss? Is management willing to test out different approaches to hearing-loss compensation? What is the management's perception of the hearing-impaired employee's work performance?
- **Work environment:** How is the relationship with management? Among the colleagues? In the work-team?
- **Hearing loss-related narratives:** What are the narratives related to hearing? Are these narratives generally positive/negative? Does the hearing-impaired employee show signs of bitterness and/or self-pity related to the hearing loss? What are the stories that lie behind these narratives?
- **Isolation:** Does the hearing-impaired employee withdraw from social activities? Is he or she always alone during work? Does he or she have a family /a social network?
- **Sense of coherence:** How is the hearing-impaired employee managing work life? Does the employee perceive the activities he or she engages in as meaningful? Does the employee find it difficult and challenging to follow conversations, receive auditive information, talk on the phone, attend meetings, attend courses, etc.?

*Topics for dialogue within the organization: Control related to hearing*

- **To create change:** Is the hearing-impaired employee able to act in order to change a negative situation for the better? Can the organization do anything to help this change happen?
- **Strategies:** Does the hearing-impaired employee use strategies in order to stay in control in difficult listening situations? What are the strategies for managing energy levels? Can organizational structures and planning support these strategies in any way?
- **Negative feelings:** Does the hearing-impaired employee show feelings of frustration or anger due to hearing-related matters? Is the employee nervous or anxious prior to meetings, courses, etc.? What happens when work routines are broken, when technical systems fail to work, etc.?
- **Breaks:** How do breaks with colleagues affect the hearing-impaired employee? Transparency about this in the work team so that the colleagues understand why the hearing-impaired employee sometimes chooses a break alone.
- **Assistive technologies:** Does the company have the technical aids needed in order for the hearing-impaired employee to perform his/her job in a satisfactory manner? Do the technical aids work as intended? Are they easy for the employee and others to operate?

*Topics for dialogue within the organization: Biopsychosocial contexts*

- **Tinnitus:** Is tinnitus an issue to the hearing-impaired employee? What increases/decreases the nuisances of tinnitus? Can situations that provoke tinnitus be avoided?
- **Visual compensation:** How can visual compensation be used to improve communication? Increase/integrate the use of visual language, text-based over audio-based information, increase visibility and light in auditory listening situations, etc.
- **Alertness:** How can unhealthy alertness be decreased by increasing knowledge of what to expect during a workday? Focus may be on noise and noise localization, work routines, arrangement of the workplace, communication strategies among colleagues, etc.
- **Patterns:** Does the hearing-impaired employee experience repetitive periods of not being able to hear at meetings, during lunch, at courses, etc.? Does the employee seem to be affected by negative narratives, withdrawal, and low self-esteem caused by such patterns?
- **Energy level:** What provides energy, and what causes fatigue? Can a workday be structured to support a balanced energy flow?

## 8.10. DISCUSSION

The second part of this article is the discussion of the findings in which the core variables are arranged into models. Theoretical aspects are drawn into the discussion in order to reach new knowledge based on a combination of findings and theory. The discussion is summed up in a model that frames both core variables and theoretical aspects. This is done in order to approach an understanding of contexts that enables a strong narrative about the self without jeopardizing hearing matters.

### 8.10.1. NARRATIVES ABOUT THE SELF

In the analysis, it became clear that the positive narratives about the hearing-impaired employee told by the person himself/herself, by management, and by colleagues, were of great importance to the person's self-perception. The narratives that we tell about ourselves may be about our relationship with other people, about work, about a hearing loss, etc. We can manage the narratives we tell about ourselves – consciously or subconsciously – by acting in particular manners, and

our actions will often affect the narratives that others tell about us. This means that we to a large extent are responsible for and can maintain and change the narratives that we are subject to. But some narratives are less ‘controllable’ and constitute us through culture and history, through family and environment, and through genetics and incidents that form us from birth throughout life. Some narratives are rooted deep inside the self as a kind of equilibrium to measure the world against us, and some narratives become a part of us unknowingly. Gaining awareness of the narratives that we are subject to gives us an opportunity to ‘rewrite’ the narratives and thus initiate change.

In the present study, the narratives about work life were fairly positive in general. A reason for this is probably that the participants, in order to partake in the intervention, felt an excess of resources by which to do this. A few potential participants withdrew after realizing the effort they had to put into joining the project. This means that the optional and voluntary participation may have led to a group of participants with more mental excess than some others who may be suffering from an excess of stress in their lives. But most of the participants had also struggled to reach that position, and in several cases, they had experienced their work lives as one big rollercoaster of ups and downs – some with severe periods of stress and depression.

### **8.10.2. NARRATIVES OVER NEEDS?**

The participants in the present study had already dealt with hearing-related matters for several years at the time of the intervention. Their work environments had already been adjusted considerably to fit several of the needs related to their hearing losses, which may have made the needs less visible during everyday work life. Several of the participants had overcome difficult listening situations through the arrangement of the physical workspace. An example was the woman with the one-person office with doors to open and close. These would signal a need for either silence/a social break or the opposite.

All of the participants were used to managing their own assistive technologies to enhance the auditive signal during work hours when talking on the phone, attending meetings, etc. But does this mean that all needs are covered? None of the participants mentioned the use of a writing interpreter, which may be helpful in certain communication situations. It is a legal right for hearing-impaired persons in Denmark to use writing interpreters in the same way that deaf persons use sign language interpreters. Yet it is not widely used among hearing impaired persons as they ‘get by’. As such, they forget the massive amount of energy ‘getting by’ demands of them.

A hypothesis took shape during the study: A positive narrative seemed to be more important to the participants than having all of the special needs related to the hearing loss covered. The participants even seemed to sometimes overachieve to obtain a positive narrative, which would express excess and skill, in order to cover up the narrative of a person with many special needs. By struggling to keep up the narrative of the self as a strong person, who is an asset to the company, the risk of compromising the special needs increases if the hearing-impaired person feels forced to cover up his/her hearing loss in different situations. Such a situation could be when a hearing-impaired person is unsure of what is being communicated and then has to rely on guessing. The person will not bother anyone by asking again, even though it means that he/she may have misunderstood the task. A typical way of thinking that suppresses hearing-related needs and may potentially lead to stress, could also be as follows: *People think I'm strange if I don't join them in the canteen for lunch, so I will do that instead of sitting by myself, even though I really need to rest my ears.*

It is hard work to combine a strong narrative and special needs. The starting point is not necessarily a weak narrative, for the weak narrative is mainly a representation of what the hearing-impaired person fears other people perceive when special needs related to the hearing loss are expressed. It is often the idea of a weak narrative that is feared rather than a defined and present one. The challenge is to turn the idea and the fear of a weak narrative into a truly strong one integrated as a fundamental part of the human being.

### 8.10.3. THE SOCIAL HUMAN BEING

It lies in human nature to be social and '*groups are a fact of human life*' (Forsythe et al., 2014, p. 253). Humans forming parts of groups is rooted in human evolution as an adaptive strategy for surviving, colonizing, and reproducing. Social cooperation and the needs that are related to this phenomenon include psychological needs, i.e., intimate relations with others, informational needs through the exchange of information, and self-esteem needs through a positive social identity (Forsythe et al., 2014).

A large part of modern life relies on the ability to act within groups through social cooperation. Work teams are a special type of group in which the members with different skills and functions work towards a common goal. This goal is only reached through coordination, interaction, and cooperation. The ability to cooperate is therefore crucial to remaining a part of a functioning team (Forsythe et al., 2014). One kind of cooperative behaviour is referred to as reciprocal altruism, which was first discussed by Charles Darwin (Darwin, 1859), and explained by Forsythe et al. as '*behaviour whereby an organism acts in a manner that temporarily reduces its*



*fitness while increasing another organism's fitness, with the expectation that the other organism will act in a similar manner at a later time'* (Forsythe et al., 2014, p. 256). This type of cooperative behaviour becomes important in the present discussion as we shall see in the following section.

#### **8.10.4. DEBT AND OVERACHIEVEMENT**

According to Forsythe et al. (2014), there are two types of reciprocal altruism: the direct, which is the act of helping someone with the expectation that that person will help you later. There is also indirect reciprocity, which is more like a moral state. This idea reflects what Forsythe et al. call the 'image score' based on the degree to which the person has helped others. Hence, the image score is continuously evaluated by others defining the probability that the person will receive help in future situations. Direct reciprocity refers to interpersonal cooperation and indirect reciprocity refers to each person's image on a team as well as a moral attitude towards the common good within that team (Forsythe et al., 2014). This perception of the act of helping may be too simple. A person may also help somebody based on a surplus of resources and thus does not expect anything back. Helping others creates status in itself, and the repayment may come in many shapes. But for now, we will uphold the description of two types of altruism described by Forsythe et al. We do so in order to explain how the hearing-impaired employee may experience a debt of gratitude when the recipient of altruistic behaviour. After all, both types are challenged when a hearing-impaired person is a part of a work team. This person, due to communicational challenges, will often need more help than the average group member in order to stay an effective part of the team. That could involve help from colleagues who repeat what is being/has been said or who take notes and summarize highlights or elements from a meeting. It could be the hearing-impaired employee needing changes in the physical environment in order to improve hearing as for example rearranging the workplace or repositioning the partakers in a meeting due to light, noise sources, assistive technologies, the use of interpreters, etc. This may accumulate into a considerable amount of help needed from both management and colleagues. For the hearing-impaired employee, it is difficult to draw on daily help from colleagues, who may repeat information, summarize the content of meetings, and make an effort to make speech comprehensible to the hearing-impaired colleague, and at the same time be able to return the help at a regular basis. Subsequently, a feeling of debt of gratitude may arise, which cannot be met on equal terms. This causes a psychological asymmetry in the hearing-impaired employee as there is an imbalance between the wish to repay the debt and the feeling of it being fair to receive help, when having a disability, without having to give anything in return.

Receiving help from management to make everyday work life with a hearing loss less challenging often involves colleagues physically repositioning themselves to do something ‘extra’ or to do things differently from what they are used to – all because of maybe just one hearing-impaired person on the team or in the organization. The mindset that causes hearing-impaired employees to overachieve, or to construct a narrative where special needs are neglected, is understandable considering the mechanisms of reciprocal altruism.

The act of overachieving is a way of greying out difficulties that are related to the hearing loss. And in this act of overachievement lies the risk of overruling the signals from the body and the special needs related to the hearing loss. Indeed, the opposite may cause an unwanted situation of unbalanced altruism.

This will always be the risk unless company management or the hearing impaired person himself/herself is aware of the mechanisms of reciprocal altruism and is able to make conscious choices. These include considering the needs of the hearing-impaired person as a common field of interest on the whole team or the company making the hearing-impaired employee an ambassador for effective communication. That way, what is understood by effective communication can be discussed openly on the team in order to make decisions and create policies for everyone to benefit with effective communication being a high priority. This is to be seen as not only in favour of the hearing-impaired employee but also as something that is considered beneficial for the whole team or organization. Initiatives could be written down and include guidelines for meetings, workplace design, reducing noise during lunch breaks, and other initiatives relevant to specific work situations or in the organization in general. And it could bring forth guidelines to follow to make the inclusion of hearing-impaired persons on the team of employees possible: i.e., installing induction loop systems, using writing interpreters at meetings, generally reducing noise, etc.

#### **8.10.5. THE PROS AND CONS OF PERSONAL ASSISTANCE**

A way of dealing with needs, which does not create imbalanced reciprocity, is to pay someone to help out the hearing-impaired employee in different challenging situations. That means by officially making assistive tasks an included part of another employee’s work tasks or by hiring an assistant. This is possible in Denmark as Danish legislation enables you to get governmental help if you are employed or self-employed and due to a *‘significant physical or mental disability need special personal assistance’* (Beskæftigelsesministeriet, 2009). This means that the company can get governmental support for making such an arrangement within the organization. The hearing-impaired employee will feel that it is

completely fine to ask for the help of a colleague since he or she knows that the colleague will be paid to assist in different matters.

There are some implications involved in this arrangement, however. First of all, the act is directed at '*compensation for handicapped employees*.' A case of hearing loss may not be considered a handicap and neither the company management nor the hearing-impaired person himself/herself will probably think of this arrangement as an option. An external body will often need to be involved to evaluate the possible initiation of personal assistance as a part of different assistive actions in the recruitment process or during employment.

Secondly, a dependency arises, which may become unhealthy, so clear guidelines and agreements need to be written down. This makes it impossible for the hearing-impaired employee to get help every single time it is needed, for such action would call for full time personal assistance and not just on Mondays and Wednesdays between 10-11 am. The risk of imbalanced reciprocity is then still present unless the help can be organized so that it suits the needs perfectly. In order for the hearing-impaired employee to know exactly when help is needed, it takes a high level of self-awareness though. And this state of mind may not be fully present to the individual or to others in the planning of the personal assistant's tasks.

Thirdly, the risk of stigmatizing the hearing-impaired employee by exhibiting the special needs through materializing it with a personal assistant increases.

The advantage of the personal-assistance arrangement is that the hearing-impaired employee will not feel that an official agreement on the help needed will leave any debt of gratitude to the colleague who performs the task.

### **8.10.6. ORGANIZATIONAL ACTION**

A 2010-study has shown that there are three important factors that characterize the strongest teams measured in collective intelligence. One could think that the determinant would be the average intelligence of the group members, but other factors played an even greater role in performing certain tasks: 1) turn taking, 2) social sensitivity, and 3) percentage of women in the group (Forsythe et al., 2014; Woolley et al., 2010).

Turn taking refers to an equal distribution of conversational turn taking for each member of the group because this is a sign of an equal opportunity to express opinions as well as the presence of a shared decision-making process among the group members (Forsythe et al., 2014). Groups where a few people dominated the conversation were simply less collectively intelligent (Woolley et al., 2010). And

social sensitivity means sensing and adapting to the cognitive and mental state of other team members (Forsythe et al., 2014). Finally, Woolley et al. expected the fact that collective intelligence was positively correlated with the proportion of females in the group to be mediated by social sensitivity because the women in the study scored better on the social sensitivity measure than men (Woolley et al., 2010).

The results of the 2010 study emphasize the need for a good communication culture – and even an official policy – that both meets the special needs of a hearing-impaired employee and embraces the characteristics of an effective work team. The advantages of introducing a communication policy in terms of turn taking are obvious as official guidelines for meetings and communication in general facilitate turn taking. Social sensitivity operates at a more abstract level, but a hypothesis is that the more information one receives about others, the easier it is to sense and adapt to their mental and cognitive states.

Luhmann talks about the social aspects of conversational themes (Luhmann, 2009, p. 197) in which the communicators through their communication express something about themselves regarding their opinions, experiences, interests, hopes, and wishes. Turn taking and the ability to hear what the group members say is then likely to increase social sensitivity in the group.

An organizational communication policy has the potential to decrease the gap between what is being communicated and what is being understood thus increasing the level of ‘correctly’ decoded information. And a good communication culture has the potential to reduce noise, which leaves more space for sensing others both visually and auditorily.

According to the above discourse, there are at least three ways of handling special needs related to hearing loss within the organization. In the following the main arguments for choosing different strategies within an organization are summed up.

#### **8.10.6.1 Different strategies for dealing with a hearing loss in organizational contexts**

##### **Non-action**

1. The organization is not dealing with it – either as a conscious choice or due to the lack of knowledge about the needs. That way, the hearing-impaired employee has to navigate at an ad hoc level throughout different situations during the workday. Hypothesizing that this type of ‘non-action’ potentially creates imbalanced altruism among the colleagues, the self-image of the hearing-impaired employee also is weakened as a result. This

increases the risk of the self-narrative becoming that of a person who needs help and who is not able to return the help at an equal level to colleagues. This narrative is referred to as a weak self-narrative in the model below (Figure 8-3).

### **Compensational action**

2. Company management can also choose to utilize the legislative options of introducing different compensatory arrangements. This could, for example, involve hiring a personal assistant either by transferring part of an employee's work-tasks to assisting the hearing-impaired employee in challenging work situations or by hiring an external assistant. That way, the hearing-impaired employee does not 'owe' anything to anyone, but the risk of stigmatizing him or her may increase as the needs related to a hearing loss are exhibited through the compensatory arrangements. The solution will balance out altruism in many situations and not leave any debt of gratitude to the colleagues. It also increases the options for engaging in more communication and thus in more turn-taking activities, which can strengthen the team. As more communication is understood, the possibility of adapting to the mental and cognitive states of others also increases, and the team is strengthened. This all adds to a strong narrative about the self, but the solution still leaves the hearing-impaired employee in a state of occasional unbalanced reciprocity as it will be impossible to predict exactly when a difficult situation arises and thus cover all challenging situations. The self-narrative will be affected by better options for communication, and thus, team performance is likely to be strengthened. Reciprocity will be both balanced and unbalanced, and there is a risk of increased stigmatization of the hearing-impaired employee. Finally, the self-narrative will most likely become a combination of a weak and a strong one.

### **Inclusive action**

3. Company management can agree to introduce a formal policy or a set of guidelines for communication, which both meet the needs of hearing-impaired employees as well as the communication needs of other employees. That way, changes within the organization that favour good communication and changes that favour improved listening are looked upon as a common strategy to increase team performance. Such actions made can even include the use of personal assistance if it is perceived as favourable to the team or company in general. Therefore, everyone on the team has the option of being an equally 'strong link', and the hearing-impaired person can create a strong narrative about the self as an integrated and included part of an effective team or organization. This would also support the inclusion idea, which is often discussed in relation to general disability rights (Jensen, 2012). A challenge is that

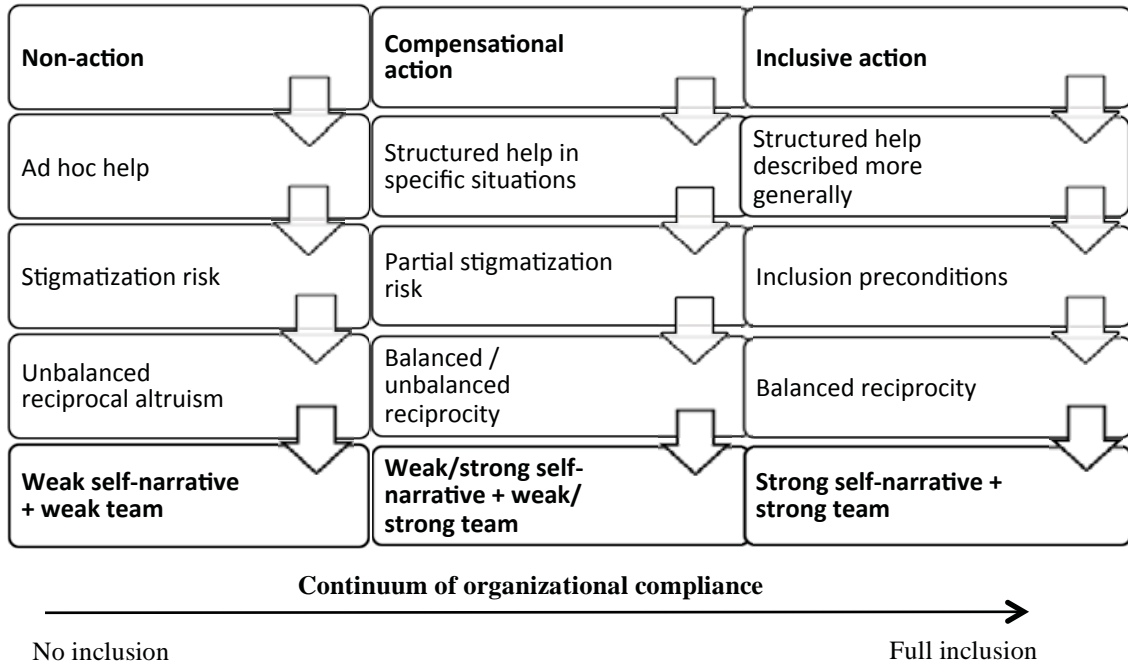
communication is uncontrollable – it is the communication *culture* that needs to be changed within the organization. There is a process to do this. Once management is convinced that a change in communication culture is the right solution for the team or the company, a second step will be to engage the employees to truly believe that changing communication will improve both individual performance, team relations, and bottom line results.

The potential outcome of the different strategies are summed up in Figure 8-3 below in which the strategy of *Non-action* causes the hearing-impaired employee to ask colleagues for help in an unstructured, ad hoc way. This increases the risk of feeling/being stigmatized within the organization or the team, and it also creates the risk of imbalanced reciprocity. The output may be a weak self-narrative and poor team performance.

*Compensational action*, on the other hand, creates a more structured strategy in order for the hearing-impaired employee to receive help, but there is still a partial risk of feeling/becoming stigmatized. The reciprocity becomes more balanced but with a risk of maintaining imbalance in some situations. Finally, the self-narrative is strengthened, and through increased *individual* team performance, the performance of the team is strengthened.

*Inclusive action* also provides more structured help but at a more general level than with *compensational action*. Through *inclusive action*, the preconditions for inclusion are present, and the reciprocity becomes balanced within the team/organization. This may, when successfully implemented, lead to both the strengthening of the self-narrative as well as general team performance.

The arrow below the boxes represents the continuum of organizational compliance, and it marks the diversity of the strategies possible and the different degrees to which an organization can decide to, for example, describe and put into praxis a communication policy that might be activated in some situations and not in others. The analytical distinction has to be emphasized in this context as activities and strategies often cut across different parts of the organization at different times and therefore are somewhat unpredictable.



*Figure 8-3: Ways of dealing with special needs related to hearing loss within an organization and the potential outcome of different strategies.*

## 8.11. CONCLUSION

In the present study, we have looked into matters that may create preconditions for successful inclusion of hearing-impaired employees in organizational contexts. Making a recognition of hearing loss and the needs that come with it in a work context is like walking on a razor's edge:

*How is it possible to keep up a strong narrative about the self and at the same time make sure that the needs related to having hearing loss are met?*

It is a question of moving the narrative from 'weak' to 'strong' without jeopardizing the special needs related to hearing loss. The word 'stress' in itself

does not seem to cover the experiences and narratives related to stress. Stressful experiences are instead expressed through negative feelings, expectancy anxiety, and thought patterns that may evolve into stress. But the concept of stress needs to be expanded into also including negative and ‘weak’ self-narratives that affect self-perception and self-esteem in a negative way. The concept of stress among hearing-impaired employees is thus closely connected to the concept of stigmatization whereas the opposite concept, which will have a positive influence on experiences of stress, is inclusion.

The dialogues based on data from the test week using ecological momentary storytelling indicated that three major themes play a role when reflecting on everyday work life with hearing loss: themes that may be determinants in the development of stress among hearing-impaired employees. These themes are ‘role and identity’, ‘control related to hearing’, and ‘biopsychosocial contexts’. These themes have been dissected into smaller parts based on the dialogues, which were carried out as a part of the method, and a scheme of topics for organizational dialogue was presented. The scheme suggested different subjects of focus when dealing with hearing loss and the ability to thrive in an organizational context. The findings showed a clear connection between stress and everyday contexts that may influence energy level and the experience of being in control, which corresponds to the 2006-study by Kramer et al. (Kramer et al., 2006). The ability to reflect and gain awareness on these contexts is essential for gaining control related to the hearing and for being able to navigate through the daily activities that either cause fatigue or provide energy.

Based on the findings from the study, a discussion, which also included theoretical aspects, was summed up in a model of organizational action presenting strategic ways to handle hearing loss within a work team and/or within the whole organization focusing on decision-making and organizational compliance. The main contribution of the study is that individual awareness of everyday work contexts, and action based on this awareness, is crucial to the ability of the employee and management to act. But also important is organizational strategy to handle a hearing loss and to act when a hearing-impaired person is employed. This factor, in combination with a focus on an introductory and ongoing dialogue about hearing and wellbeing, may determine not only the individual degree of inclusion in the work team – it may also determine overall team performance.



## CHAPTER 9. ARTICLE 4

# HVORDAN REDUCERER VI STRESS HOS ERHVERVSAKTIVE MED HØRETAB? - DIALOGVÆRKTØJ TIL AT FORSTÅ OG GUIDE MEDARBEJDERE I ET STRESSFORLØB

[Published]

*Af Katja Lund og Claus Andreas Foss Rosenstand*

### 9.1. ABSTRACT

Stressrelateret sygefravær og dårlig social tilknytning til kolleger og ledelse er virkeligheden for mange danskere med nedsat hørelse. Samtidig er det vanskeligt for virksomhederne at håndtere stress hos gruppen, fordi der mangler indsigt i de udfordringer og sammenhænge, der har betydning for udviklingen af stress, når man har et høretab. I kapitlet arbejder vi hen imod konstruktionen af et dialogværktøj, der kan skabe denne indsigt samt støtte arbejdet med stressreduktion og -forebyggelse. Dialogværktøjet er blevet til på baggrund af resultater fra forløb med metoden Ecological Momentary Storytelling. 6 erhvervsaktive med høretab deltog i perioden 2013 – 2014. Indledende brugertests indikerer at dialogværktøjet har potentiale som et organisatorisk forståelses- og procesværktøj til reduktion og forebyggelse af stress hos målgruppen.

## 9.2. INDLEDNING

Stress er et stadig stigende problem i vores samfund, og på arbejdspladserne er der et stigende antal medarbejdere, der oplever stress; hvilket både er en økonomisk og menneskelig udfordring. Heldigvis er der i langt de fleste virksomheder akutforanstaltninger, der aktiveres, hvis en medarbejder sygemeldes med stress. Og i mange organisationer findes der også stressforebyggende tiltag, der tager afsæt i en generel forståelse af arbejdsrelateret stress. Men når nedsat hørelse spiller ind som en faktor, er HR-konsulenter, der håndterer stress i organisationerne, ofte på bar bund i forhold til viden om, hvordan stress hænger sammen med høretab. Dette står i kontrast til, at omkring hver 10. dansker i den erhvervsaktive alder har så store problemer med hørelsen, at de har vanskeligt ved at følge en samtale, når flere personer er samlet (Clausen, 2003).

Dette kapitel har derfor det formål, at klæde HR-konsulenten på til at igangsætte et stressreduktionsforløb for medarbejdere med høreproblemer. Det gøres ud fra en helhedsforståelse af medarbejderens liv, hvorfor HR-konsulenten skal forstå den specielle livs- og arbejdssituation, en medarbejder med høretab befinder sig i.

Erhvervsaktive med høretab står ofte alene uden at føle, at kolleger og ledelse kan sætte sig ind i de problematikker, der krydser grænsen mellem arbejdsliv og høretab. Situationen er anderledes, end hvis man som normalthørende oplever stress i forbindelse med sit arbejdsliv, da der hos personer med høretab er specielle kommunikationsbarrierer, der tilføjes det, der kan betegnes som arbejdsrelateret stress. Fælles faktorer for arbejdsrelateret stress er bl.a. uhensigtsmæssige krav til medarbejderne, mangel på kontrol over arbejdet og manglende opbakning fra kolleger og ledelse (Det Europæiske Miljøagentur, u.å.). Har man et høretab, vil man oveni disse faktorer udfordres af energiforbrug i forbindelse med kommunikation, usikkerhed omkring kommunikation og ofte også usikkerhed omkring relationer på grund af forringede kommunikationsmuligheder.

Fakta er, at når hver 10. erhvervsaktive dansker har høreproblemer, så vil der være medarbejdere, som oplever problemer med hørelsen og kommunikationen, på rigtig mange danske arbejdspladser. Men det er også ofte sådan, at kolleger og ledelse ikke er klar over eller ikke tænker over, at en kollega har et høretab, hvorfor usikker kommunikation kan misforstås som eksempelvis negativitet og manglende lyst til at deltage i arbejdslivets sociale og faglige sider.

Man har en talemåde indenfor høreområdet : 'Den blinde stakkel, det døve spektakel'. Essensen er, at mennesker med nedsat synsfunktion bliver mødt med medlidenhed, mens mennesker med nedsat hørefunktion bliver mødt med irritation, fordi man ofte skal gentage, hvad der lige er blevet sagt. Den nedsatte hørefunktion skaber nogle daglige udfordringer, idet der er øget risiko for en dårligere sammenhæng mellem meddelelse og forståelse i kommunikationen. En logisk følge

er et unaturligt højt energiforbrug hos personen med høretab, der opstår i forsøget på at forstå det kommunikerede. Usikkerheden i forhold til kommunikationen kan resultere i et ændret selv billede, når man holder op med at stole på sin egen forståelse af det, der kommunikerer. Dermed udfordres opfattelsen af eget værd. Denne nedadgående spiral fremskyndes af det, der kommer til udtryk i talemåden, nemlig andres opfattelse af personen med høretab som værende til besvær.

En udfordring i denne sammenhæng er, at et høretab er en næsten usynlig funktionsnedsættelse, og at selv mennesker i den nære omgangskreds, der kender til høretabet, kan have svært ved at agere hensigtsmæssigt i forhold til det. Det er vanskeligt at styre, hvornår man bliver irriteret over langsom eller misforstået kommunikation – særligt i pressede situationer, der ofte opstår i forbindelse med at skulle præstere i en arbejdsammenhæng. Derfor er et typisk karaktertræk hos mennesker med nedsat hørelse, at de dækker over høretabet for ikke at være til besvær, og mange lader ofte som om, de har forstået det kommunikerede for ikke at bede andre mennesker om at gentage sig selv. Ved at dække over høretabet og ikke sørge for at lade andre vide, hvordan kommunikationen fungerer bedst, bidrager medarbejderen med høretab således selv til en negativ spiral, hvor kommunikationen kræver større og større energi. Således stiger afhængigheden af forskellige specielle kommunikationsstrategier til at dække over høretabet. Og der er derfor en betydelig risiko for, at denne negative spiral resulterer i stadig sværere stress.

Vi vil gerne sætte HR-konsulenten i stand til at hjælpe stressede medarbejdere med høreproblemer ind i en positiv spiral, hvor energien i stadig større grad bruges på arbejdet frem for på høreudfordringer. Og ideelt at skabe en arbejdsplads, hvor høretab ikke potentielt fører til stress.

Derfor kommer vi med en række konkrete anbefalinger til HR-konsulenten, ligesom vi præsenterer et dialogværktøj, der kan fungere som et arbejdsredskab i stressforebyggelses- og stressreduktionsforløb.

### **9.3. STRESS, HØRELSE OG ARBEJDSLIV – HVORDAN HÆNGER DET SAMMEN?**

Der er mange forklaringer på, at stress opstår i forbindelse med et høretab, men ovennævnte mekanismer er uden tvivl medvirkende faktorer. I en hollandsk undersøgelse fra 2006 sammenlignes sygefraværet over 12 måneder hos en gruppe hørehæmmede og en gruppe normalthørende. Antallet af personer, der meldte sig syge, viste sig at være signifikant højere hos gruppen af personer med høretab (77%) end hos gruppen af normalthørende (55%), og resultaterne viste også, at forskellen mellem de to grupper skyldtes stressrelaterede tilstande. Endvidere viste

undersøgelsen, at evnen til at kunne identificere samt skelne mellem lyde var udslagsgivende i forhold til oplevelsen af udtrætning (Kramer et al., 2006), som kan være en afgørende faktor i et stressoptrappingsforløb (Kocalevent m.fl., 2011). Og i en undersøgelse fra 2009 omhandlende hørestatus, behovet for hvile efter arbejde samt psykosocialt arbejdsmiljø dokumenteres en direkte sammenhæng mellem hørenedsættelse og et øget behov for hvile (Nachtegaal et al., 2009).

Men i hvilke situationer sker udtrætningen helt præcist? Hvad er det, der tager og giver energi hen over en arbejdsdag? Hvad hænger sammen med hørelsen? Hvad hænger sammen med arbejdsbyrden? Og hvad hænger sammen med kontekstuelle og relationelle forhold, der kan være udslagsgivende i stresssammenhæng? Det er nogle af de spørgsmål, vi vil tage op i denne undersøgelse, med henblik på at bidrage til effektive stressforebyggelses- og reduktionsforløb i organisationer med hørenedsatte medarbejdere.

Ved at betragte erhvervsaktive hørehæmmedes situation i lyset af den udvikling, erhvervslivet har oplevet siden midten af 00'erne, hvor nedskæringer, fyringer og lukninger grundet den internationale finanskrisen har domineret billedet, tydeliggøres nogle af de udfordringer, som mange personer med høretab oplever i hverdagen.

Stress er generelt et stigende problem, der kræver et stort fokus i organisationer i dag. Antallet af danskere, der føler sig stressede, er oppe på godt 15 procent af alle beskæftigede i Danmark, og selvom antallet af stressramte er stagneret i perioden fra 2010 til 2013 (Christensen m.fl., 2013), er antallet steget støt siden 80'erne, hvor det lå på kun 5,8 procent fordelt på hele befolkningen (Ekholm m.fl., 2006). Den øgede oplevelse af stress kan hænge sammen med et øget arbejdspress, der i samme periode er steget markant fra 18,3% til 28,2% af de adspurgte, der føler, at de har svært ved at nå alle arbejdsopgaver (Sundhed og Sygelighed, 2006).

SFI (Det Nationale Forskningscenter for Velfærd) har foretaget to større undersøgelser med fokus på personer med høretab i forhold til arbejdsmarkedet (Christensen, 2006; Clausen, 2003) der, uden dog at måle direkte sygefravær, konkluderer at personer med høretab har en lavere beskæftigelsesgrad samt en lavere ugentlig arbejdstid, ligesom resultaterne viser, at der sker en relativt tidlig tilbagetrækning fra arbejdsmarkedet hos gruppen af personer med høretab i forhold til hos normalthørende. Den tidlige tilbagetrækning samt resultater fra undersøgelserne, der viser en dårligere social tilknytning til ledelse og kolleger, tyder på, at der sker en påvirkning, der skaber forringelse af arbejdslivet hos medarbejdere med høretab (Christensen, 2006).

Fokus i dette kapitel er en forståelse af *hvorfor* situationen tegner sig som den gør. Nævnte undersøgelser viser en række resultater, der hænger sammen med høretab og arbejdsliv. Men hvad er det lige præcis, der sker, i den enkelte medarbejders liv

og arbejdsliv? Hvilke aktiviteter, strategier, forhold, relationer osv. kan ud fra et helhedsperspektiv påvirke udfaldet i en negativ eller positiv retning? Det har vi set nærmere på.

#### **9.4. AT FORSTÅ MENNESKER – HISTORIER FRA CASTBERGGÅRD**

Problematikkerne, der kommer til udtryk i undersøgelsen, er delvist rodfæstede i en praksisforståelse hos den ene forfatter, Lund, som er opbygget via fokus på området gennem aktiviteter på Castberggård Job- og Udviklingscenter. Centeret tilbyder en række forskellige forløb for døve og personer med høretab, der enten står udenfor arbejdsmarkedet eller er i fare for at miste deres arbejde (Castberggård, u.å. (2)). Siden 2008 har Lund været engageret i to projekter med fokus på høretab i arbejdssammenhæng: Arbejdsliv og Hørelse og HHIA (tidligere Hørehæmmede I Arbejde – nu På Vej I Arbejde). Arbejdsliv og Hørelse var et treårigt projekt støttet af Arbejdsmarkedsstyrelsen, hvor Castberggård i et samarbejde med Hedensted Kommune tilbød hørescreeninger til kommunens ansatte. Der blev i løbet af projektet foretaget 531 screeninger og samtaler med medarbejdere. Et af hovedresultaterne var, at en stor procentdel (35 %) af alle medarbejdere i daginstitutioner havde et begyndende støjrelateret høretab (Castberggård, 2010). I forhold til dette kapitels fokus er det interessante ikke så meget, at der tilsyneladende var en sammenhæng mellem arbejdsområde og typen af høretab, men nærmere de fortællinger medarbejderne løftede sløret for. Det var fortællinger fra hverdagen omkring oplevelsen af hørelsen i et større perspektiv, hvor arbejdsdagen, hørelsen og hjemmelivet ofte blev sat i relation til hinanden. Flere medarbejdere i daginstitutioner fortalte, hvordan de havde ændret adfærd fra f.eks. tidligere at have nydt musik på vej hjem i bilen fra arbejde til ikke at kunne holde nogen form for lyde ud efter endt arbejdsdag. Denne støjfølsomhed påvirkede livet hjemme, idet de ofte oplevede at tysse eller blive irriterede på familiemedlemmer. Eller de beskrev, hvorledes de kunne være i tvivl om, hvorvidt de havde dårlig hørelse, fordi de ofte ikke hørte, eller måske nærmere havde overskud til at forstå, når familiemedlemmer talte til dem efter en arbejdsdag. Overbevisningen hos medarbejderne i daginstitutionerne var, at det hang sammen med en udtrætning pga. støj på arbejdspladsen.

HHIA-projektet har i flere år været et af Castberggårds flagskibe. Målet er at hjælpe personer med nedsat hørelse uden arbejde tættere på arbejdsmarkedet. En stor del af deltagerne har oplevet kortere eller længere stressrelaterede sygdomsforløb, og flere har i den sammenhæng også oplevet perioder med depression. Projektet kører med længerevarende holdforløb, hvor deltagerne bor på stedet og får undervisning i bl.a. høretaktik, som overordnet handler om at blive klædt på til bedre at kunne navigere i arbejdslivet med et høretab; viden om kommunikation, hørestrategier,

høretekniske muligheder osv. I et kursusforløb er der indlagt individuelle samtaler, og der foregår mange holdsamtaler om emner relateret til arbejdsliv og hørelse. I løbet af de to år fra 2010 – 2012, hvor Lund fungerede som leder af HHIA, blev det tydeligt, at der var et behov for at afdække, hvorledes forskellige faktorer i en persons liv spiller ind på oplevelsen af stress og sammenhæng i livet. Behovet blev i 2012 koblet til det Ph.d.-forløb, Lund de seneste tre år har arbejdet med.

Et eksempel på en deltagerfortælling, er fra et HHIA-kursus i oktober 2014, hvor Lund underviste. En 50-årig arbejdsløs kvinde fortæller, hvordan hun har kæmpet for at bevare en grad af kontrol med arbejdsdagen, men at det koster på søvnsiden. Pga. tinnitus har hun svært ved at sove, når hun går i seng. Hun fortæller, at når hun ligger i sengen og vender og drejer sig, er hun rigtig god til at 'slå sig selv i hovedet med politimanden', der fortæller hende, at hun skal gøre tingene på en bestemt måde, for at få det til at hænge sammen den efterfølgende dag på arbejdet: *"Du er nødt til at gentage, hvad din kollega siger til dig, så du har forstået, hvad det er, hun siger. Og du er nødt til at have styr på, når dén kunde dér siger, at han vil have dén vare dér, så er du lige nødt til at gøre sådan og sådan. Gå hen i mappen og slå op om det nu kan passe, og gør nu lige dit og gør nu lige dat"*. Hun fortæller, at tankerne gør det svært for hende at sove, så hendes arbejdsliv har været præget af søvnunderskud og stress forbundet med angst for at misforstå kommunikationen og dermed lave fejl. Dette er blot et enkelt eksempel og en enkelt ud af mange fortællinger om vanskeligheder med at få sammenhæng i tilværelsen, når man har et høretab.

Eksemplet indeholder en række ledsagende problematikker, der alle kan føre til stress i form af søvnmangel ved selvmonitorerende og –bebrejdende tanker, angst for ikke at kunne varetage sit arbejde godt nok, angst for at misforstå kommunikation samt etablering og brug af strategier for at undgå dette, men som i sig selv kræver et ekstra energiforbrug.

## 9.5. FORSKNINGSSPØRGSMÅL

Både problematikkerne, der indkredses i forbindelse med problemfeltet stress, hørelse og arbejdsliv, samt problematikkerne, der tydeliggøres gennem erfaringerne fra Castberggård, er almindelige hos erhvervsaktive medarbejdere med høretab. Vi tror på, at det kan lade sig gøre at øge indsatsen med at forebygge og reducere stress hos denne medarbejdergruppe ude i virksomhederne, hvis der i HR-afdelingerne er lettere adgang til viden om og redskaber til at beskæftige sig med området. Derfor er vi nået frem til følgende forskningsspørgsmål:

*Hvordan konstrueres et dialogværktøj, der bidrager til, at HR-konsulenten på den ene side (1) er bedre i stand til at forstå den situation en medarbejder med høretab befinder sig i og på den anden side (2) bliver bedre i stand til at hjælpe medarbejderen til at forebygge og reducere stresspåvirkningen i hverdagen?*

## 9.6. UNDERSØGELSESDSIGN

Undersøgelsen består af fem dele. Rammebeskrivelse, metodebeskrivelse, analyseresultater, anbefalinger og diskussion.

Rammebeskrivelse:

Den første del er en rammebeskrivelse af den forståelse, vi opererer ud fra. Forståelsesrammen har til formål at sætte læseren ind i

- den stressforståelse, der ligger til grund for undersøgelsen
- den kommunikationsforståelse, vi finder nødvendig for at kunne koble teori til praksis

Metodebeskrivelse:

Metodebeskrivelsen tydeliggør, hvorledes vi får indblik i de forskellige situationer, medarbejdere med høretab befinder sig i i løbet af en arbejdsdag, samt de oplevelser, der knytter sig til situationerne. Det er en beskrivelse af måden hvorpå, vi får indblik i, hvordan stressorer opleves og håndteres hen over en dag, samt hvordan forskellige kontekster påvirker hinanden i en helhedsorienteret optik.

Analyseresultater:

Ved gennemgang af analyseresultaterne når vi frem til en praksisfunderet forståelse, der samles op i to modeller, jf. Figur 9-2 og Figur 9-3 baseret på et kvalitativt indblik i erhvervsaktive hørehæmmedes hverdag.

Diskussion:

Vi diskuterer, hvorledes resultaterne og den teoretiske ramme kan bringes i anvendelse i forhold til det overordnede formål samt forskningsspørgsmålet, og der konstrueres et dialogværktøj til brug i samtalsituationen mellem stressramte hørehæmmede medarbejdere og HR-konsulenter, jf. Figur 9-4.

Anbefalinger:

Anbefalingerne bliver til på baggrund af analyseresultaterne samt den stress- og kommunikationsforståelse, der danner udgangspunkt for undersøgelsen, og som udfoldes i rammebeskrivelsen.

## 9.7. STRESS I EN SALUTOGENETISK FORSTÅELESERAMME

Vi betragter stress ud fra en biopsykosocial vinkel, idet vi ikke mener, det er muligt at separere det fysiske, det mentale og de sammenhænge, vi indgår i, ved oplevelsen af stress. Vi adopterer det helhedsperspektiv og den salutogenetiske idé, hvorfra det, der betegnes oplevelsen af sammenhæng, forkortet OAS, udspringer (Antonovsky, 2000).

Aaron Antonovsky (1923 – 1994) var en internationalt kendt og respekteret medicinsk sociolog, der i 1970 gjorde en opdagelse, som fik ham til at tænke over, hvilke faktorer, der er med til at gøre os sunde frem for syge. Han kaldte dette den salutogenetiske orientering eller idé, hvor fokus er på kilder til sundhed frem for sygdom. Hans nysgerrighed blev vakt gennem et studie, hvor han stødte på en række kvinder, der havde siddet i koncentrationslejre under 2. Verdenskrig. En stor del af kvinderne havde efterfølgende haft et hårdt liv præget af en lav grad af livskvalitet. Men en lille del af kvinderne havde klaret sig godt og oplevede en høj grad af livskvalitet, og det var dét, der vakte Antonovskys nysgerrighed. Hvad var det, der gjorde, at disse kvinder klarede det så godt? Han nåede frem til, at oplevelsen af sammenhæng, var den afgørende forskel (Antonovsky, 2000). Han skriver: *"...oplevelsen af sammenhæng er en vigtig determinant for bevarelsen af ens placering på det kontinuum, der går fra et godt til et dårligt helbred, og for bevægelse mod den sunde pol."* (Antonovsky, 2000, p. 33). For at kunne vurdere, hvor man befinder sig på dette kontinuum og således blive i stand til at bevæge sig mod den sunde pol, er det nødvendigt at skille begrebet ad. Antonovsky beskriver det som bestående af tre komponenter: 'begribelighed', 'håndterbarhed' og 'meningsfuldhed' og definerer OAS som: *"... en global indstilling, der udtrykker den udstrækning, i hvilken man har en gennemgående, blivende, men også dynamisk følelse af tillid til, at (1) de stimuli, der kommer fra ens indre og ydre miljø, er strukturerede, forudsigelige og forståelige; (2) der står tilstrækkelige ressourcer til rådighed for en til at klare de krav, disse stimuli stiller; og (3) disse krav er udfordringer, det er værd at engagere sig i."* (Antonovsky, 2000, p. 37).

Det vil sige at:

- Graden af struktur, forudsigelighed og forståelighed i de stimuli, der kommer fra ens indre og ydre miljø, afgør graden af 'begribelighed'
- Graden af ressourcer til rådighed for at klare de krav disse stimuli stiller, afgør graden af 'håndterbarhed'
- Oplevelsen af, at disse krav er udfordringer, der er værd at engagere sig i, afgør graden af 'meningsfuldhed'



Vi forstår her stimuli som stressorer. Antonovsky beskriver stressorer som de krav en organisme stilles overfor, men som der ikke er nogen automatisk adaptiv respons på (Antonovsky, 2000). Denne definition af stressorer er også den, vi anvender i undersøgelsen.

De tre komponenter beskriver Antonovsky som uløseligt forbundne, men samtidig vægter han komponenten 'meningsfuldhed' som den, der har størst betydning, mens han beskriver det som usædvanligt, hvis der er en lav grad af begribelighed men en høj grad af håndterbarhed. Ofte vil stimuli ikke være strukturerede, forudsigelige og forståelige, hvis man har et høretab, idet mulighederne for at kommunikere og forstå kommunikation er forringede. Dvs. at man med et høretab er disponeret for at score lavt på begribelighed, og derfor, ifølge Antonovsky, sandsynligvis også vil score lavt på håndterbarhed. Man er altså tilsyneladende som hørehæmmet i udgangspunktet dårligere stillet i forhold til at opleve høj OAS end mennesker uden høretab, da fysiologiske faktorer sænker begribeligheds-komponenten og dermed også evnen til at håndtere dele af livet. Dermed må vi forvente, at modstandsressourceperspektivet hos mange personer med høretab står og falder med komponenten 'meningsfuldhed'. Udgangspunktet for den stabile og dynamiske OAS og muligheden for at håndtere stress tænkes dermed svækket på forhånd.

Antonovsky afviser altså dikotomien om sundhed og sygdom, og betragter i stedet mennesket ud fra det flerdimensionelle kontinuum, der strækker sig mellem godt og dårligt helbred. I forhold til sygdomsforebyggelse og -reduktion er fokus på de faktorer, der kan fastholde eller bevæge personen mod den sunde pol – altså et slags mestringsspektiv. Den patologiske opfattelse af stressorers virkning på et individ er, at de udelukkende er sygdomsfremmende. Med den salutogenetiske optik betragtes stressorerne derimod ud fra et sundhedsfremmepotentiale. Dvs., at man ikke blot ser på, hvad der kan fastholde en person på det kontinuum, der strækker sig mellem godt og dårligt helbred, men også ser og udnytter potentialet i de stressfaktorer, der kan være direkte sundhedsfremmende. Essensen af den salutogenetiske tilgang er, at den menneskelige organisme befinder sig i en konstant tilstand af heterostatisk ubalance, idet man udsættes for stressorer gennem hele livet – stressorer, der har sit afsæt i både indre og ydre påvirkninger (Antonovsky, 2000). Antonovsky anvender en metafor, hvor han betragter livet som en flod, og hvor oplevelsen af sammenhæng i vidt omfang bestemmer, hvor godt man svømmer: *"Forskellige mennesker klarer sig forskelligt, selvom den flod, de svømmer i, er den samme"* (Antonovsky, 2000, p. 107). Det er altså et mulighedsperspektiv, der bygger på en erkendelse af, at stressorer kan påvirke et menneske negativt eller positivt. Påvirkningen af stressorerne kan således fastholde eller flytte et menneske i retning af godt eller dårligt helbred på det kontinuum, der forbinder de to poler.

Dette perspektiv vil vi holde fast i, når vi undersøger stressorer hos personer med høretab, idet det giver os mulighed for at:

1. Arbejde i forskellige retninger, både i en afdækning af negative påvirkninger og positive påvirkninger. På den måde kan vi vurdere muligheder for at navigere udenom negative stressorer og bruge positive påvirkninger aktivt til at opbygge energi og overskud i hverdagen.
2. Forstå dialogværktøjet som et procesværktøj, hvor HR-konsulenten arbejder med den positive spiral, så medarbejderen gennem processen bliver bedre i stand til at fokusere sin energi hen imod arbejdet frem for mod høreproblematikker.

## 9.8. HØREKOMMUNIKATION I EN SYSTEMTEORETISK FORSTÅELESERAMME

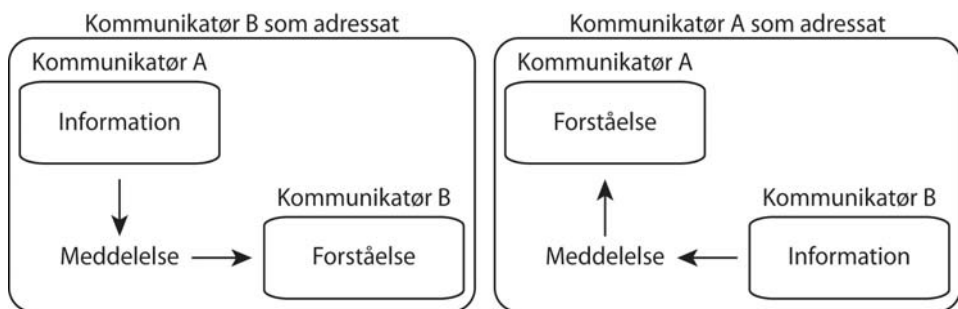
I det følgende gives en grundforståelse af den kommunikationsvirkelighed, mennesker med høretab befinder sig i. Derfor har vi valgt at beskrive det, der foregår i kommunikation mellem mennesker generelt, og relatere det til det at have et høretab. Vi har valgt en systemteoretisk forståelsesramme med afsæt i Niklas Luhmanns kommunikationsforståelse, da vi dermed mener at kunne tydeliggøre forskelle i forudsætningerne for at kommunikere med og uden et høretab. Denne forståelsesramme vil således bidrage til at forstå analyseresultaterne ud fra et kommunikationsteoretisk grundlag.

I beskrivelsen af kommunikation beskriver Luhmann en afgørende mekanisme: *"Når en kommunikativ handling følger efter en anden, prøver denne altid, om den forudgående kommunikation er blevet forstået."* og *"Testen kan falde negativt ud, og så giver den ofte anledning til en refleksiv kommunikation om kommunikation. Men for at gøre dette muligt (eller for det meste: for at gøre det overflødigt) må en forståelsestest altid ledsage kommunikationen, således at en del af opmærksomheden altid afsættes til forståelseskontrol."* (Luhmann, 2007, side 184). Det handler altså om at sikre en fælles forståelse af det, der kommunikeres om. Der findes forskellige strategier, der kan anvendes med dette for øje. Ligesom der i tekstanalyse arbejdes med redundans (gentagelser), der giver teksten en sammenhængende karakter, er der tale om en sproglig redundans i en kommunikationssituation, der sikrer, at der er konsensus mellem de kommunikerende parter i forhold til det emne, der kommunikeres om.

I kommunikationen med personer med høretab er der ofte et behov for at indarbejde mere bevidste sproglige strategier, der netop handler om verbalt at gentage det, der er kommunikeret, for at sikre, kommunikationen er forstået korrekt. Dette bliver endnu mere eksPLICIT, når der opstår et 'negativt udfald af testen', som Luhmann beskriver det i sin tekst.

Når der foregår det, der kaldes *repair* (Skelt, 2012), søger man at lappe på hullerne i kommunikationen. Alligevel vil personen med høretab ofte opleve at stå tilbage med en del huller, der ikke er fyldt ud. Dette skaber et dilemma, for for at kunne udføre repair, er det nødvendigt at kende til disse huller i kommunikationen. Det, der ofte sker, er, at en person med høretab forsøger at fortsætte kommunikationen for at se, om der skulle komme noget, der kan lede vedkommende tilbage på rette vej, så en samtale kan fortsætte. Ofte har der været flere forståelses-huller, før det bliver bevidst for den anden kommunikerende part, at der er behov for repair – dvs. at gå tilbage i kommunikationen for at finde ud af, hvor forståelsen bristede hos personen med høretab og få samlet op på det, der er blevet kommunikeret efterfølgende.

Luhmann beskriver kommunikation som en enhed af de tre kommunikative selektioner; information, meddelelse og forståelse (Luhmann, 2000)<sup>26</sup>, hvilket er illustreret i nedenstående figur 9-1.



Figur 9-1: Vores model af Luhmanns kommunikationsforståelse.

Ved kommunikatør B som adressat, vælger kommunikatør A en information (første selektion), der ikke kan iagttages af andre end kommunikatør A, hvorfor han vælger en meddelelse for denne information (anden selektion). Kommunikatør B er adressat for denne meddelelse og vælger en måde, at forstå den iagttagede meddelelse på (tredje selektion). Den samme mekanisme gælder med kommunikatør A som adressat. I denne sammenhæng, hvor der fokuseres på interpersonel kommunikation, hvor de kommunikerende parter er fysisk til stede i samme rum, er både kommunikatør A og B adressat samtidigt, om end der er taleturer, hvor kommunikatørerne skiftes til verbale meddelelser, så sker der

<sup>26</sup> Luhmann beskriver også en fjerde selektion i sin kommunikationsteori, der ikke er kommunikativ. Dette er en adfærdsselektion, som knytter sig til den faktiske adfærd eller handling, som følger af de kommunikative selektioner.

parallelt hermed meddelelser i form af eksempelvis små nik, øjenkontakt og fysisk berøring.

### 9.8.1. DEN VIGTIGE KONTEKST

Der følger altid misforståelse med kommunikation, idet der er forskel på information, meddelelse og forståelse. Den samme information kan meddeles (kodes) på mange måder, ligesom den samme meddelelse kan forstås (afkodes) på mange måder. Der er således altid tale om dobbeltkontingente valg blandt åbne repertoarer af muligheder for meddelelser og forståelser. Der er tale om kvalificerede gæt på, hvad det er for en information, den anden kommunikerende parts meddelelse henviser til. For at øge sandsynligheden for at have succes med meddelelser og forståelser, tager de kommunikerende parter den forudgående kommunikation og konteksten i brug. For personer med høretab, hvor der ofte er huller i kommunikationen, betyder det, at den forudgående kommunikation kan bruges i mindre grad, og for at kompensere herfor må konteksten bruges i højere grad. Det gælder både når personen med høretab vælger meddelelser og forståelser. Personen med høretab er således i højere grad end andre afhængig af konteksten for at have succes med meddelelser og forståelser. Der kan naturligvis være flere kommunikerende parter end to; men de kommunikative selektioner er de samme, blot med flere adressater og flere muligheder for misforståelse. Endvidere er der også stor mulighed for, at konteksten er mere kompliceret.

## 9.9. HVORDAN FÅR VI INDSIGT I BETYDNINGSFULDE SAMMENHÆNGE?

Denne undersøgelse er en mindre del af et større forskningsprojekt om situationen og perspektiver hos erhvervsaktive med høretab. For at undersøge, hvordan forskellige kontekster spiller sammen i erhvervsaktive hørehæmmedes liv, valgte vi at anvende en datatrianguleringsmetode udviklet af Lisbeth Kappelgaard og Katja Lund i 2012-2013 (Kappelgaard og Lund, 2013). Metoden, Ecological Momentary Storytelling, blev til på baggrund af et fælles interessefelt, stress og arbejdsliv, med henholdsvis lærere og personer med høretab som primære målgrupper. I 2011 gennemførte forskningsprojektet HumanSensing på AAU (Aalborg Universitet, u.å.) et pilotforløb, hvor både Kappelgaard og Lund deltog som testpersoner. I pilotforløbet blev forskellige dataopsamlingsmetoder testet: hjerterytmemålinger, Galvanic Skin Response (GSR), GPS-tracking og experience sampling method, som er løbende indsamling af data om oplevelser i nuet. Alle datakilder dækkes af begrebet EMA (ecological momentary assessments) som er målinger, der giver adgang til viden om nuet enten i form af biosensordata eller registrering af oplevelser i et givent øjeblik (Shiffman, Stone og Hufford, 2008). Med målinger

over tid er det således muligt at vurdere sammenhængen mellem forskellige kontekster, der går på tværs af fysiske, mentale og sociale forhold samt at se tendenser i forhold fx kobling af tid på dagen/ugen, aktiviteter, humør, kroppens reaktioner, støj, tilstedeværelsen af andre mennesker, oplevelse af sammenhæng osv.

### **9.9.1. HVORDAN FÅR VI ADGANG TIL DEN PERSONLIGE OPLEVELSE?**

Med afsæt i erfaringerne med pilottesten i 2011, udviklede Kappelgaard og Lund metoden Ecological Momentary Storytelling. Formålet var at udvikle en metode, der på den ene side kunne imødekomme den helhedsforståelse, der kommer til udtryk i det biopsykosociale stressperspektiv, og på den anden side fastholde øjebliksbilleder og dermed give et indblik i sammenhænge hen over tid. Derfor blev tidsrammen for dataindsamling sat til en uge, således det både var muligt at indhente data fra arbejdsuger og weekender for at finde ud af, hvilke faktorer, der havde betydning for energiforbrug, humør og oplevelsen af sammenhæng på baggrund af en helhedsforståelse af situationen.

Metoden bygger på datatriangulering, hvor en del af undersøgelsen skulle give os indblik i kroppens måde at opleve hverdagen på. Her valgte vi at måle på hjerterytmevariabilitet, der kan give et indblik i kroppens oplevelse af aktivitet i hvile og stresssituationer. Mens en anden del af undersøgelsen skulle give indblik i oplevelsen af de forskellige situationer, personerne befandt sig i i løbet af en dag – nærmere betegnet de psykologiske og sociale kontekster oplevet i nuet. Her valgte vi at stille en række spørgsmål, der blev installeret som en applikation på en mobiltelefon, som testdeltagerne skulle have på sig under forløbet. Deltagerne blev bedt om at besvare spørgsmålene en gang i timen i alle vågne timer hen over en uge. Ved at fastholde oplevelser i nuet var det i de efterfølgende dialogsituationer muligt at sammenholde informationer om deltagerens færden med informationer om kroppens reaktioner på forskellige situationer. Alle data tjente efterfølgende som en støtteredskeber i den afsluttende dialog, således at hukommelsen blev hjulpet på vej for at undgå nogle af de bias, der kan være forbundet med hukommelsesbaseret retrospektiv refleksion (Kappelgaard og Lund, 2013). Metoden gav os indsigt i følgende sammenhænge hos deltagerne:

- aktivitet
- humør
- energiniveau
- støj
- oplevelsen af god/dårlig kommunikation

- tilstedeværelsen af andre mennesker
- oplevelsen af sammenhæng

Det var desuden muligt for deltagerne at tilføje tekst, tage et billede, optage et lydclip, ligesom det blev registreret, hvor personen havde befundet sig på et givent tidspunkt. Her er det vigtigt at understrege, at data udelukkende fungerede som hukommelsesankere for deltagerne selv, og at ingen andre end deltagerne og den ene forfatter, Lund, havde adgang til data under forløbet. I denne undersøgelse er det dialogerne, der er blevet til på baggrund af dataopsamlingen, der analyseres i forhold til undersøgelsens mål.

## 9.10. HVEM VAR DELTAGERNE?

Der blev i perioden 2013 – 2014 gennemført seks testforløb med erhvervsaktive med høretab i alderen 50 – 64 år. Tre var kvinder og tre var mænd, hvoraf to af mændene arbejdede på den samme arbejdsplads. Deltagerne var ansatte på uddannelsessituationer i både administrative og forskningsorienterede funktioner; kommunalt ansatte med borgerkontakt og i praktisk og administrativt rettede mellemlederfunktioner; samt servicemedarbejdere på private arbejdspladser og på skoler.

Deltagerne havde både cochlear implantater og høreapparater, hvilket gjorde en gennemsnitsudregning af deres objektive høretab vanskelig. Tilstedeværelsen og oplevelsen, nærmere end graden, af høretab var således afgørende for deltagelse. Ved forløbets begyndelse blev der samlet deltagerfortællinger, der tog afsæt i egen oplevelse af livet med et høretab.

## 9.11. HVORDAN NÅR VI FREM TIL RESULTATER, DER KAN ANVENDES I KONSTRUKTIONEN AF ET DIALOGVÆRKTØJ?

Resultaterne, vi når frem til i dette kapitel, som vi kan kalde det sekundære analyseforløb, er som nævnt kun en lille del af en større analyse, vi kalder det primære analyseforløb, som er lavet i forbindelse med Lunds Ph.d.-afhandling, der forventes udgivet i 2015. Dvs., der er lavet en større analyse af dialogerne med afsæt i klassisk grounded theory (Glaser og Strauss, 1967) med en relativt åben dataindsamling i dialogsituationen. Hermed menes, at der ikke er opstillet en særlig spørgeramme, indenfor hvilken deltagerne skulle bevæge sig i dialogsituationen, men at dialogen i højere grad var styret af deltagerne egne oplevelser fra testugen samt af de opsamlede data og de refleksioner, der blev til på baggrund af disse.

Grounded theory blev oprindeligt udviklet med det mål at skabe bedre sammenhæng mellem teorikonstruktion og praksis, og det er også formålet med denne undersøgelse – at tydeliggøre sammenhænge via en teoretisering af praksissammenhænge, der kan hjælpe os med at forstå, hvordan forskellige kontekster spiller sammen ude på arbejdspladser med medarbejdere med høretab. Data fra dialogsituationerne er enten optaget på audio eller video på nær en enkelt dialog, der, grundet et ønske fra deltageren, ikke blev optaget men i stedet er dokumenteret i form af notater samt en sammenskrivning af disse efter endt forløb. Data fra de øvrige forløb er transskriberet og gennemarbejdet i et kodningsforløb i tre niveauer: åben kodning, selektiv kodning og teoretisk kodning (Glaser og Strauss, 1967).

## **9.12. DET PRIMÆRE ANALYSEFORLØB – POTENTIELLE STRESSUDLØSERE**

Kodningsforløbet i det primære analyseforløb blev udført med en løbende teoridannelse, hvor data langsomt formede sig til tematikker, der mandede ud i en større forståelse af feltet. Denne forståelse er ikke beskrevet her, da det ikke er denne undersøgelses fokus. Men allerede tidligt i analyseprocessen opstod der en række kernekategorier, der kan betegnes som potentielle stressudlødere:

- Metode
- Rolle og identitet
- Kontrol
- Biopsykosociale sammenhænge

I forhold til denne undersøgelse er kategorien 'metode' fravalgt som fokusområde, da det her ikke er målet at argumentere for metodens anvendelighed men derimod undersøge potentielle stressorer, der ikke har sammenhæng med metoden. Indenfor de fire kernekategorier, der i skemaet nedenfor er listet vandret, blev der i den primære analyse fundet 13 underkategorier, jf. Figur 9-2. Underkategorierne har en række fællesemner, som er listet i venstre kolonne og som kobler underkategorierne på tværs af skemaet for at illustrere, at der ikke er et skarpt skel imellem kategorierne, men at de bevæger sig ind over hinanden, hænger sammen og påvirker hinanden. Skemaet kan således give en HR-konsulent en indledende fornemmelse af potentielle stressudlødere hos medarbejdere med høretab og dermed bidrage til at prioritere indsatsområder i stressforløbet.

<b>Main categories</b>				
	<b>Method</b>	<b>Role and identity</b>	<b>Control</b>	<b>Biopsychosocial contexts</b>
The presence of others		<i>3. The role of the self in relation to others</i>	<i>5. Maintaining control in the presence of other people</i>	
Assistive perspectives	<i>1. Assistive perspectives of the method</i>		<i>6. Dependency on assistive technologies</i>	
Contexts			<i>7. To take control in life</i>	<i>10. Biopsychosocial contexts related to the hearing</i> <i>11. Biopsychosocial contexts not directly related to the hearing</i>
The self	<i>2. Data as an indicator for here-and-now experiences</i>	<i>4. Self-perception</i>	<i>8. The relationship between feelings and control</i>	
Strategies			<i>9. Strategies as a means to maintain control</i>	
Energy				<i>12. What provides energy and what causes fatigue?</i> <i>13. The importance of meaningful activities and relationships to provide energy</i>

Tabel 9-2: kategorier fra det primære analyseforløb



Skemaet kan således via en operationalisering af kategorierne bidrage til at skabe et hurtigt overblik over de emner, man som HR-konsulent kan tage op og spørge ind til for at pejle sig ind på indsatsområder til selve HR-samtalen sammen med stressramte personer med høretab. En række eksempler på spørgsmål, der kan stilles med afsæt i skemaet, er listet nedenfor. Disse vil kunne udbygges og tilrettes, således at de passer til den særlige situation og den person, man arbejder med, og de vil kunne supplere det dialogværktøj, der udarbejdes på baggrund af diskussionen, jf. Figur 9-4.

'The presence of others' koblet med 'Role and Identity':

3. *Hvordan betragter du din egen rolle i forhold til dine kolleger?*
4. *Hvad ville dine kolleger sige om dig, hvis de skulle beskrive dig?*

'The presence of others' koblet med 'Control':

5. *Hvad gør du, hvis du ikke hører, hvad andre siger?*
6. *Holder du ind imellem pauser alene for at hente energi?*
7. *Hvad oplever du, hvis dine pauser eller andre pustehuller bliver afbrudt?*

'Assistive technologies' koblet med 'Control':

8. *I hvilken grad anvender du høretekniske hjælpemidler?*
9. *Har du de hjælpemidler, du har behov for?*

'Contexts' koblet med 'Biopsychosocial contexts':

10. *Hvordan mener du, at dit høretab påvirker din arbejdsdag?*
11. *Er der andre forhold, der gør sig gældende i stresssammenhæng ud over hørelsen?*
12. *Er din arbejdsplads indrettet, så du undgår støj, og har gode muligheder for at kommunikere?*

'The self' koblet med 'Role and identity':

13. *Hvilken værdi bringer du ind i organisationen?*

'The self' koblet med 'Control'

14. *Hvad kommer du til at føle, hvis du ikke hører det, dine kolleger/kunderne/patienterne/eleverne osv. siger?*

'Strategies' koblet med 'Control':

15. *Hvad gør du i det daglige for at høre bedst muligt (til møder, i pauser, til frokost osv.)?*

'Energy' koblet med 'Biopsychosocial contexts':

16. *Hvor bevidst er du om, hvad der giver og tager energi (aktiviteter, relationer, arbejdsopgaver etc.)?*  
 17. *Hvilke aktiviteter/relationer er meningsfulde for dig?*  
 18. *Kan du tilrettelægge din dag, så du tager hensyn til, at der skal være balance i dit energiniveau?*

Udfordringen med at anvende skemaet alene kan være, at det ikke skaber nok overblik hos hverken HR-konsulenten eller medarbejderen med høretab. Spørgsmålene på baggrund af skemaet er dog relevante, men hvis de står alene, er der en risiko for, at stressproblematikker bliver individualiserede, og at den erhvervsaktive med høretab står alene i kampen om at få lavet om på situationen, så snart HR-konsulenten har sagt farvel og lukket døren. Hvis man for alvor skal have en mulighed for ikke bare at bevæge sig i en positiv retning på det kontinuum, der går imellem godt og dårligt helbred eller imellem stressoptrapning og stressreduktion, men faktisk også at forblive et sted, hvor der ikke sker en stressoptrapning igen, er det nødvendigt at gå ind i en proces, hvor man inddrager forhold, der omfatter hele organisationen i form af fokus på kontekstuelle og relationelle forhold, der lægger sig til kategorierne.

Det følgende afsnit er det sekundære analyseforløb, hvor kategorierne gennemgås med uddrag fra dialogerne, og hvor der reflekteres i forhold til dette kapitels fokus på stressreduktion i organisatorisk sammenhæng. Begreberne til at kontekstualisere og operationalisere kategorierne til anvendelse i et dialogværktøj udfoldes her yderligere, ligesom der sættes fokus på relationelle forhold, der udspringer af kategorierne.

### 9.13. DET SEKUNDÆRE ANALYSEFORLØB – KONTEKSTUELLE OG RELATIONELLE FORHOLD

I det primære analyseforløb blev der identificeret en række kategorier, der på forskellig vis kredser om emnerne hørelse, kommunikation og stress, men ordbrugen trækker ofte på forhold, der i stedet for at italesætte emnerne direkte, i højere grad handler om potentielle stressudløsere – altså stressorer, der bliver dominerende, fordi de er vanskelige at håndtere i en given situation. Her kommer emner som kontrol, strategi og energiforvaltning ind, da disse handler om at tilrettelægge dagen således, at der navigeres udenom potentielle stressorer eller de forsøges minimeret, således at situationen og stressorerne bliver håndterbare.

Analysen har tydeliggjort en sammenhæng mellem netop evnen til at håndtere en situation, at handle i den og kontrollere den, og evnen til at forblive positivt indstillet. En hypotese, der er vokset ud af dette er, at sammenhængen mellem (1) kontrol, (2) at kunne handle og (3) at være positivt indstillet med troen på 'at det nok skal gå' er tæt knyttet til det at være en aktiv del af arbejdsmarkedet. Dette er netop også en pointe beskrevet af Antonovsky, idet muligheden for at handle på eller undvige en stressfaktor bidrager til at fastholde eller rykke personer i en positiv retning på kontinuet mellem godt og dårligt helbred (Antonovsky, 2000), og dermed forbedrer en medarbejders muligheder for at fastholde arbejdet og forbedre livskvaliteten.

De tre kernekategorier 'rolle og identitet', 'kontrol' og 'biopsykosociale sammenhænge' præsenteres i en systematisk rækkefølge, mens de kontekstuelle og relationelle forhold, der gør sig gældende indenfor hver kategori, beskrives med afsæt i de potentielle stressudløsere (jf. Figur 9-2). Disse forhold kan blive bestemmende for, om den stressramte indgår i en negativ eller positiv spiral. Citater fra dialogsituationerne inddrages løbende for at synliggøre pointerne i en praksissammenhæng. De skal som udgangspunkt betragtes som repræsenterende nuancer og tendenser i kategorierne nærmere end enkeltstående holdninger og refleksioner, med mindre andet nævnes.

#### 9.13.1. ROLLE OG IDENTITET

Den positive fortælling om selvet kan ifølge Antonovsky (2000) sidestilles med kontrol og håndterbarhed, som er ét af de tre elementer, der tilsammen udgør begrebet 'oplevelse af sammenhæng'. Den positive egenfortælling hører altså sammen med det at kunne håndtere stressorer, og står i relation til emnet 'kontrol'. I analysen fremgår det, at der i en række tilfælde reflekteres over selvet i forhold til 'den anden'. Et emne, der særligt lægges vægt på blandt de mandlige deltagere, er

humor blandt kollegerne – at kollegerne kender til høretabet og dermed kan tillægge det en humoristisk vinkel i form af 'godmodigt mobberi': *"Ja, det er hyggeligt ... hvad skal man kalde det ... godmodigt mobberi. Det er jo det der gør det lidt sjovt, ikke? Jeg kan jo også godt give igen ... der er ligevægt, ja!"*

I forlængelse af emnet humor er ærlighed omkring høretab og behov forbundet med dette. Det nævnes som vigtigt hos flere af deltagerne i forhold til at kunne navigere udenom de mest vanskelige situationer, idet der kan tages de rette hensyn, uden at personen med høretab skal handle aktivt mere end højest nødvendigt. Det at skulle handle aktivt og tage stilling til tingene nævnes i sammenhæng med refleksioner omkring energiforbrug, som er et tilbagevendende emne gennem hele analysen og er repræsenteret både i forbindelse med kontrol og biopsykosociale sammenhænge. En pointe her er, at tingene hænger sammen, og en dominoeffekt igangsættes, når et af emnerne kommer i spil i praksissituationer.

Den oprindelige tråd, selvets rolle i forhold til 'den anden', leder videre til dikotomien omkring det at blive forstået og det at blive anerkendt. Her indikerer analyseresultaterne, at det hos flere af deltagerne er vigtigere at opnå anerkendelse af den arbejdsmæssige indsats på en arbejdsplads, end det er at blive forstået som en medarbejder med et høretab. Dette forhold er gældende på et ledelsesniveau, hvor flere udtrykker glæde forbundet med anerkendelse og angst og stress forbundet med usikkerhed i relationen til ledelsen. Årsagen til, at det netop er forholdene 'forståelse' og 'anerkendelse', der sammenlignes, er, at det hos samtlige deltagere er de eneste to forhold, der nævnes i refleksioner omkring ledelsen på de respektive arbejdspladser, og at der er en overvejende procentdel af udtalelserne, der lægger vægt på det at blive anerkendt for det arbejde, man udfører, som det der vægtertungest i forhold til helhedsoplevelsen af hverdagen og arbejdslivet.

Denne anerkendelse er en del af det narrativ, der struktureres omkring selvet, ligesom det at sammenligne sig selv med andre kan være med til at definere narrativet. Eksempler på sammenligning med mennesker, der både har det lettere (f.eks. ved at sammenligne sig selv med hørende) eller sværere (f.eks. gennem sammenligning med mennesker, der hører dårligere end én selv) kommer til udtryk gennem analysen. Dette opfattes som en måde at søge at definere sig selv på, da et tydeligt selvbillede har sammenhæng med det at kunne håndtere tingene og være i kontrol (Antonovsky, 2000).

Endelig er der eksempler på narrativer om selvet, der bygger på undersøgelser, kendsgerninger og fagpersoner med forstand på at definere roller, og som derfor fortælles mere 'uindpakket' og direkte end andre narrativer, da der tilsyneladende opleves en større grad af gyldighed forbundet med de narrativer, der ikke 'blot' bygger på ens eget selvbillede. I en refleksion over et team-forløb i virksomheden med fokus på roller fortæller en deltager: *"Jeg har fundet ud af, at jeg er rigtig god til at formidle og holde sammen på tingene."* Ligesom han i den kendsgerning, at

han har været ansat i 25 år, finder en gyldighed i at fremsætte, at: *“...jeg [er] meget den, man kommer og spørger til råds. Jeg har været her i snart 25 år, så jeg har en anden viden, end den du kan købe dig til.”*

Narrativet skal i denne sammenhæng baseres på noget udenfor selvet for at blive en gyldig sandhed: 'ekspertens' udsagn eller en uomtvistelig kendsgerning (har arbejdet der i 25 år). Et narrativ baseret på noget udenfor, eller eksternt i forhold til, selvet kan relateres til metodens eksternalisering af det Kappelgaard og Lund kalder 'den tavse viden' eller 'the private language' med henvisning til Wittgenstein. Fortællingen gøres tilgængelig og håndgribelig via eksternalisering, der muliggør 'den talte viden', eller 'the shared language' (Wittgenstein, 2011), der udtrykkes gennem refleksionen med afsæt i data, der er indsamlet hen over testugen med Ecological Momentary Storytelling. Det er her 'storytelling'-delen aktiveres og støtter op om et fokus på narrativer som vigtige i deltagernes selvforståelse.

Emnet isolation handler også om selvet i relation til andre, og står i kontrast til det aktivt at vælge ensomheden. Gradvis isolation kan forekomme uden at man opdager det, hvorimod det at vælge at være alene kan være en del af en strategi. Én af deltagerne opdagede i løbet af testugen, at hun altid svarede, at hun var alene i rummet. Det havde hun ikke tænkt over før, men opdagelsen fik hende til at reflektere over, hvordan hun kunne ændre noget i sit liv, så hun blev mere social, uden at det gik ud over hendes behov for ro omkring sig. I analysen fremtræder flere eksempler på aktiv fravælgelse af samvær med andre mennesker, og ofte er det en del af en daglig struktur: at lukke døren til sit kontor på bestemte tidspunkter af dagen, hvor der er ekstra behov for ro; at vælge en pause i et rum alene efter frokosten med kollegerne; at tilrettelægge dagen, så man kan nå at være alene en halv time om morgenen eller efter arbejde, inden familien står op eller kommer hjem fra arbejde og skole osv. Fravalget af samvær med andre mennesker kan også være baseret på dårlige erfaringer, som i eksemplet her: *“...jeg er vant til det der: kan man høre hvad de siger, når man kommer på det kursus eller er det helt lost at gå på det kursus? Det oplever jeg jo engang imellem, at man ligeså godt kunne være blevet hjemme.”* Et andet eksempel er fra kantinen: *“Jeg kan godt høre, at der er noget, men jeg kan ikke høre, hvad der bliver sagt eller om det specifikt er til mig, og så får man det lidt træls, ikk’.* Og jeg ved på forhånd, at selvom jeg spørger igen, så vil jeg stadig ikke kunne høre det, hvis lytteforholdene er elendige. Så et eller andet sted opgiver jeg på forhånd, fordi erfaringen fortæller mig, at jeg ville ikke høre det alligevel. [...] Ja, jeg oplever det dagligt.” Oplevelser, der leder til sådanne tankemønstre præget af en grad af forventningsangst, kan føre til uhensigtsmæssigt og isolationsfremkaldende fravalg af bestemte aktiviteter (måske flere og flere) – og dermed fravalg af samvær med andre.

### 9.13.2. KONTROL

En deltager fortæller i dialogsituationen, at han havde overvundet hjerteproblemer ved at ændre på sin livsstil (mad, sport osv.). Efter at være kommet på den anden side af sygdomsforløbet, føler han sig glad og succesfuld, fordi han har handlet sig ud af sygdommen – han har taget kontrollen og ændret på sin egen situation – men da han rammes af kraftig tinnitus, oplever han at stå uden handlemuligheder, og han bliver opgivende: *"Og så kom der sådan noget med ørerne her, og så tænkte jeg: nå jamen det kan da heller ikke være rigtigt, at man... det er jo så bare sådan."* Oveni at føle opgivelsen kommer de negative følelser: *"...jeg er slet ikke i tvivl – det er den, der i den grad irriterer mig, og det er jo garanteret også den, der tager ens energi. Fordi den konstante hyletone ... du kan næsten ikke lade være med at gå og tænke på den. Også selvom du har en masse andet at tænke på, ikke? Så hører du den ind imellem. Så skal man skrue mere op for høreapparaterne, så hører man mere udefra. Men så skruer du fandeme også op for så meget andet støj, ikke også."* Han er ikke i stand til at handle sig ud af tinnitus – han har gjort et forsøg ved at få høreapparater, hvilket i nogen grad dæmper hans tinnitus. Men valget afføder et dilemma, idet justering af lyden i høreapparaterne medfører *"...så meget andet støj..."*. Dvs. der er ikke nogen reel kontrol eller handlemulighed, idet det ene er værre end det andet.

Samtidig er høretekniske hjælpemidler en måde at forsøge at få en slags kontrol med høretabet – gøre noget ved det; forbedre situationen. Men teknikken kan ikke gøre det ud for tabet af den naturlige hørelse, og der er mange udfordringer forbundet med at anvende høretekniske hjælpemidler, der både kan betragtes som afhængighedsskabende, frustrerende og til en hvis grad også kontrolskabende, alt efter hvor godt høretab og teknik 'passer sammen'.

Kontrol handler i høj grad om at minimere konsekvenserne af et høretab – eller af tinnitus – i en given situation og i det daglige. Her er hørestrategier en slags værktøj, der kan tages i brug for at bevare kontrollen i situationer, der potentielt kan føre til tab af kontrol hos hørehæmmede. I dialogsituationer nævnes forskellige måder at bevare kontrollen på ved f.eks. at mundaflæse: *"... når jeg kigger på én. Det er utroligt så meget som det hjælper. For selvom jeg har høreapparat og går ved siden af nogen, så kan det altså godt smutte alligevel. Der er jo også alt muligt anden støj jo. Så selvom de er blevet bedre med årene høreapparaterne... væsentligt bedre... så vil jeg altså stadigvæk gerne se på folk."* Fokus er ligeledes på at reducere baggrundsstøj, at informere omgivelserne om høretabet, så kollegerne har mulighed for at tage hensyn i dialogen osv.

At planlægge strategier for dagen kan også bidrage til øget kontrol, idet der for det første opbygges en kendt og forudsigelig struktur, der kan medvirke til mere indre balance: *"Jeg vil egentlig godt sidde alene for mig selv, når jeg kommer hjem - hvis*

*rutinen brydes, påvirker det mit humør*” – man kan sige, at en brudt rutine skaber en grad af tab af kontrol. For det andet hjælper strategierne til at forvalte energien, således at den overvældende træthed, som er kendetegnende hos mange mennesker med høretab, minimeres. At møde på arbejde en time tidligere end alle andre kan være den afgørende forskel for, hvorledes dagens potentielle stressorer håndteres og energiniveauet forvaltes – og dermed hvordan helhedsoplevelsen af dagen fremstår. En deltager fortæller i dialogen, at hun overvejer at gøre netop dette for at have en time, inden alle andre møder på arbejde. Samtidig giver det hende mulighed for at holde fyraften, således at den mest kritiske tid på dagen, hvad angår energi og træthed, kan tilbringes på sofaen derhjemme, inden resten af familien kommer hjem.

Sådanne strukturer og strategier kan bidrage med at bevare kontrollen over helhedsindtrykket af dagen som overvejende positivt, ligesom et stabilt energiniveau kan opretholdes og dermed skabe mulighed for at være mere fokuseret og til stede i de aktiviteter, man er engageret – her tænkes i særdeleshed også arbejdsmæssigt, hvor netop hypotesen om kontrol som afgørende for en positiv tilgang og en stærkere arbejdsmarkedstilknytning bliver gældende.

Det at have 'fristeder' er i det hele taget vigtigt for flere af deltagerne i forbindelse med at opbygge energi, og en kvinde reflekterer i dialogen over forskellige aktiviteter, der kan være med til at skabe disse fristeder: en kop te eller kaffe, shopping, samvær med sine børn osv. Essensen i disse aktiviteter handler om to ting, der på baggrund af resultaterne tilsyneladende er uløseligt forbundet, hvis aktiviteten skal give energi: sammenhængen mellem *en meningsfuld aktivitet* og *det ikke at skulle forholde sig til noget*.

### 9.13.3. BIOPSYKOSOCIALE SAMMENHÆNGE

Flere gange i analysen støder vi på nysgerrighed i forhold til at få indblik i, hvorledes kroppen reagerer og kompenserer for høretabet. Når kroppen er anspændt, fordi man er usikker på, hvor en lyd kommer fra, eller fordi man er usikker på, om kommunikationen er rettet mod én selv – som i eksemplet ovenfor fra kantinen – er der en fornemmelse hos flere af deltagerne af at kroppen har været på overarbejde: *”Jeg har i hvert fald observeret, at jeg ser flere ting før alle andre ser dem... med mit syn. Og det kunne jeg godt forestille mig er en kompensation for mit høretab. Ja, og så tænker jeg også; jamen har det også noget at gøre med de indre organer... kompenserer de også på en eller anden måde? Det at vi har skullet gå med den her hjerterytmemåler har fået mig til at tænke over om andre af kroppens funktioner også fungerer anderledes som en slags kompensation for høretabet? Det kunne jeg godt forestille mig.”* Eksternalisering af tanker og fornemmelser, hjælper her deltageren til at opnå et refleksionsniveau, hvor der

skabes bevidsthed om ikke bare synets evne til at kompensere for et høretab – det har han været delvist opmærksom på allerede inden forløbet - men sammenhængen mellem høretabet og resten af kroppen, og den måde den påvirkes og reagerer på, når der f.eks. opstår usikkerhed med kommunikation og lokalisering af lyd.

Den sammenhæng mellem ydre påvirkninger og indre reaktioner, der er størst fokus på, er årsager til udtrætning, som er et problem for samtlige deltagere. Og her er støj en vigtig faktor, og særligt evnen til at navigere udenom denne, hvilket ofte hænger sammen med strategier, der allerede er integrerede i deres hverdag. Der, hvor støjen bliver et problem, er i de situationer, hvor det ikke er muligt at navigere udenom, som hvis man er nødt til at kommunikere i støjende omgivelser: *“...jeg var ovre på genbrugspladsen derovre. Der var det rigtig svært at følge kommunikationen, fordi de kørte med truck ... og der var en lastbil, der kom. Det generede mig lidt. ... de kører og der er det rigtig svært at følge en samtale. Det irriterer mig.”* Eller hvis en rutine ikke kan gennemføres pga. forhold, der umuliggør en fastholdelse af strategisk tilrettelagt rutiner: *“Normalt når jeg er oppe på laboratoriet, så slukker jeg for mine høreapparater, fordi der er så meget støj deroppe. Men jeg havde vagt, så jeg havde ikke slukket for dem. Så det generede mig.”*

Gode lytteforhold handler dog ikke kun om udefrakommende støj – flere af deltagerne lider af tinnitus, som kan være særligt generende i perioder, og ofte er den også svingende, så den ind imellem er kraftigere.

Ligesom tinnitus kan svinge, kommer det også til udtryk i dialogerne, at udtrætning kan knytte sig til bestemte tidspunkter på dagen og til bestemte aktiviteter – som f.eks. efter at have været sammen med mange mennesker i frokostpausen, eller efter fyraften. Det bliver dog også tydeligt, at udtrætning ikke altid er knyttet til forhold omkring hørelsen. Også forhold som problematiske eller energikrævende relationer eller *“...at skulle overskue mange ting...”* nævnes som energitappere.

Selve evalueringsprocessen er hos de fleste af deltagerne motiverende i sig selv – der lader til at være en generel nysgerrighed i forhold til at få indblik i det tavse og private sprog, som ofte ligger som fornemmelser men som først når et reflekteret bevidsthedsstadium i dialogsituationen: *“... det er faktisk interessant det her. Og det bekræfter mig i nogle ting.”*

Afslutningsvis er der et fokus på sammenhængen mellem energigivende aktiviteter og de associationer, der er forbundet med disse: at 'finde energi i en kop kaffe' eller at tilbringe tid sammen med sine børn, hvor energien hentes i den glæde, der er naturligt til stede. Her ses sammenhængen mellem en meningsfuld aktivitet, der ikke kræver for meget stillingtagen af deltageren.



### 9.13.4. OPSAMLING PÅ ANALYSEN

En opsamling, der forbinder kernekategorierne og potentielle stressorer fra den primære analyse med de kontekstuelle og relationelle forhold i den sekundære analyse, sammenfattes i modellen nedenfor. Modellens flader overskrider hinanden idet de ofte vil være vanskelige at skille ad i praksis. Dvs. sker der en positiv udvikling på ét af punkterne vil flere sandsynligvis følge trop (den positive spiral). Der kan fx arbejdes med accept af et høretab gennem øget refleksion og en positiv egenfortælling. En gennemgang af modellen skaber således også mulighed for at øge sammenhængen i indsatsen.

#### Rolle og identitet

Den positive/negative egenfortælling om egen situation og om selvet i forhold til andre

De narrativer andre fortæller om én har betydning for egenfortællingen/selvopfattelsen

Vigtigheden af humor og 'godmodigt mobberi' (i modsætning til ikke-godmodig/ødelæggende mobning)

Kollegernes kendskab til høretabet og behov forbundet med det via information og åbenhed i organisationen

Anerkendende ledelse er afgørende

Vigtigheden af at kunne eksternalisere og bevidstgøre egenfortællingen, tanker og følelser gennem refleksioner i nuet

Opmærksomhed på tegn på isolation

Vigtigheden af energiopbyggende pauser, hvor fravælgelse af samvær med andre er del af strategi

Italesætte forventningsangst, der bygger på dårlige erfaringer med kommunikation

#### Biopsykosociale sammenhænge

Opbygge bevidsthed om kroppens reaktioner i forskellige sammenhænge

Opbygge bevidsthed om, hvorledes kroppen kompenserer for høretabet

Øge mulighederne for at træffe bevidste valg ved at øge refleksionsniveauet

Italesætte usikkerhed og angst i forbindelse med kommunikation

Italesætte usikkerhed i forbindelse med lokalisering og genkendelse af lyd

Identificere årsager til udtrætning gennem øget bevidsthed (samvær med andre, tinnitus, en lang arbejdsdag, at skulle overskue mange ting)

Identificere støjklude og handle på muligheden for reduktion af støj

Skabe gode lytteforhold

Indarbejde energigivende aktiviteter

#### Kontrol

Identificere handlemuligheder, der kan forbedre situationen

Arbejde med accept af situationen, hvis man ikke kan handle sig ud af det

Sørge for at der er de nødvendige høretekniske hjælpemidler

Være opmærksom på, at høretekniske hjælpemidler kan spille forskellige roller: kan skabe afhængighed/angst for at de svigter, frustration, følelse af kontrol, kompensere for høretab

Arbejde med hørestrategier til at bevare kontrol (kompenserende)

Opmærksomhed på, at en kendt og forudsigelig struktur (rutiner) kan skabe bedre indre balance

Opmærksomhed på, at en brudt rutine skaber tab af kontrol (og påvirker humøret)

Strategier kan anvendes som redskab til energiforvaltning (at være 'på forkant med dagen')

Opmærksomhed på betydningen af meningsfulde aktiviteter

Forsøge at indarbejde 'fristeder' i dagen (som er meningsfulde og hvor man ikke skal forholde sig til noget)

Figur 9-3: Model over kontekstuelle og relationelle forhold, der kan være afgørende for udviklingen af stress hos erhvervsaktive hørehæmmede

I forhold til at øge refleksionsniveauet og fokus på nu-og-her oplevelser, der således også øger bevidsthedsniveauet og mulighederne for at træffe mere bevidste valg i hverdagen, kan forskellige metoder tages i brug. Man kan med fordel anvende forskellige typer EMA (forskellige måder at dokumentere oplevelser i nuet), som f.eks. dagbogsskrivning og notater fra hverdagen til mere avancerede systemer som Ecological Momentary Storytelling. Men også narrative metoder som narrativ teori og Material Storytelling (Strand, 2012) kan med fordel bringes i spil.

I det følgende kapitel diskuteres vigtige aspekter af undersøgelsen, som danner grundlag for stressforståelsen og konstruktionen af et dialogværktøj, jf. Figur 4. Heri inddrages også det teoretiske udgangspunkt, idet det spiller en vigtig rolle i forhold til at favne de aspekter, der tydeliggøres i modellen, jf. Figur 9-3, samt italesættes gennem de empiriske udsagn.

## 9.14. DISKUSSION

Analyseresultaterne tydeliggør nogle tendenser, der indikerer, at muligheden for at handle er vigtig for at kunne skabe en proces, hvor der arbejdes med den positive spiral:

Manglende mulighed for at handle → Tab af kontrol → Negative følelser → Negative tankemønstre (dårligere forudsætninger for stærk arbejdsmarkedstilknytning)

Mulighed for at handle → Bevarelse af kontrol → Positiv oplevelse → Positive tankemønstre (bedre forudsætninger for stærk arbejdsmarkedstilknytning)

I sammenkoblingen af resultaterne fra den primære og den sekundære analyse flyttes en del af ansvaret for at reducere stress fra medarbejderen med høretab over på organisationen. Ligeledes peger den sekundære analyse på kontekstuelle forhold, der automatisk giver organisationen et større ansvar, hvilket kan omsættes til praksis gennem inddragelse af HR-konsulenten som proceskoordinator og vidensinstans på høreområdet. Således kan konsulenten dels være med til at skabe rammerne for samtalen og dels bidrage med at skabe en struktur i hverdagen, bl.a. ved at støtte medarbejderen i at fastholde et balanceret energiniveau hen over en

arbejdsdag. Samtidig kan HR-konsulentene advokere for medarbejderen i andre organisatoriske sammenhænge, der kan handle om alt fra at arbejde med kommunikationskultur eller hørepolitik i virksomheden til arbejdspladsindretning samt at sikre, at der er de nødvendige høretekniske hjælpemidler.

Med udgangspunkt i den teoretiske ramme samt i den tilegnede viden om potentielle stressorer og kontekstuelle/relationelle forhold, der er præsenteret indtil nu, vil vi kaste os ud i konstruktionen af et dialogværktøj, der kan anvendes i arbejdet med at skabe en positiv spiral hos den stressramte.

Rammen er stressreduktion, og derfor er det vigtigt at inddrage OAS (oplevelsen af sammenhæng) og de komponenter, dette begreb rummer, da en høj OAS ifølge Antonovsky er lig med en lav grad af stress og omvendt (Antonovsky, 2000). Et andet forhold, vi må have med, er høretabet, hvorfor vi inddrager resultaterne fra både den primære og den sekundære analyse, idet de repræsenterer potentialer i arbejdet med at reducere stress på både et stressudløsende og modstandsskabende niveau. Resultaterne tydeliggør desuden koblingen mellem den kommunikationsforståelse, der præsenteres i rammebeskrivelsen, og høreudfordringer i praksis.

OAS består som nævnt af delkomponenterne begribelighed, håndterbarhed og meningsfuldhed. Vi vil derfor beskrive de emner, vi har fundet frem til, som værende centrale for erhvervsaktive med høretab indenfor disse tre komponenter. Målet er at konstruere et værktøj, der gør det muligt at forstå helheden af et høretab, men som også kan anvendes i en proces, hvor der arbejdes med mestring i salutogenetisk forstand.

Håndterbarhed handler om, hvorvidt man føler, at de ressourcer, der er brug for for at klare krav, er til stede. Livsforandringer kan være med til at skabe stress alt efter oplevelsen af at kunne håndtere dem. Men håndterbarhed kan også handle om, hvordan man håndterer relationen til andre; om man føler sig uretfærdigt behandlet; om man ser lyst på tilværelsen; har positive/negative forventninger til andre, sig selv, til fremtiden; om man kan 'slippe' vanskelige situationer igen, og i hvor høj grad man oplever at kunne kontrollere egne følelser og tanker. Idet kontrol og håndterbarhed, ifølge Antonovsky (2000), kan sidestilles med hinanden, understreger resultaterne fra analysen de udfordringerne, mennesker med høretab kan opleve. Samtidig fandt vi ud af, at der kan arbejdes med komponenten 'håndterbarhed' gennem det positive narrativ om selvet.

Begribelighed kan i forhold til undersøgelsens fokus handle om, hvordan personen med høretab oplever relationen med andre og det at forstå og/eller blive forstået i kommunikationssammenhæng. Men det kan også handle om at forstå egne reaktioner eller de forandringer, der sker i ens liv.

Meningsfuldhed handler om, hvorvidt livet, opgaver, en situation osv. giver mening. Hvis livet og de aktiviteter, man beskæftiger sig med, er interessante og meningsfulde, giver glæde og tilfredshed, har et mål osv., kan motivationen for at arbejde hen imod et mål også være til stede. Ofte vil det være forbundet med store omvæltninger i livet og tab eller alvorlig sygdom hos en selv eller ens nærmeste, hvis oplevelsen af meningsfuldhed er lav. Et høretab, der f.eks. gradvist er blevet større og mere invaliderende, kan skabe en oplevelse af dyb personlig krise og en sorg over tabet – ikke blot af hørelse men også af de muligheder, man har mistet i forhold til at leve det liv, man havde drømt om og måske levede før høretabet.

Vi opstiller delelementerne i værktøjet indenfor disse tre komponenter. Tanken med værktøjet er, at det skal skabe et helhedsbillede, der tager hensyn til høreudfordringer, men samtidigt ikke ekskluderer andet end høreudfordringer, der også kan være relevante for stresssituationen. Dialogværktøjet dækker bredt i forhold til at finde ud af, hvorledes indre og ydre forhold hænger sammen. Hvad hænger sammen med hørelsen og kommunikation? Hvad hænger sammen med arbejdsopgaver? Hvad hænger sammen med livsbegivenheder? Hvad hænger sammen med relationer? Hvordan er den indre oplevelse af sammenhæng? Hvad hænger sammen med ressourcer til rådighed? Osv. Emnerne er udvalgt på baggrund af undersøgelsen som et hele, dvs. med afsæt i såvel den teoretiske viden som i analyseresultaterne.





#### 9.14.1. DIALOGVÆRKTØJ TIL STRESSREDUKTION

Dialogværktøjet er testet sammen med fire stressramte personer med høretab, der står udenfor arbejdsmarkedet, og som i perioden februar – april 2015 fulgte et HHIA-kursus på Castberggård. Derudover er værktøjet evalueret af en socialrådgiver og en job- og udviklingskonsulent på Castberggård, som begge arbejder med stressramte personer med høretab i det daglige. Værktøjet er justeret efter brugertesten og evalueringen. Markeringerne i skemaet er eksempler på, hvorledes værktøjet tænkes anvendt med udvælgelse af fokuspunkter, der kan justeres fra gang til gang.

Håndterbarhed	I høj grad	I nogen grad	I lille grad	Slet ikke
Har et godt netværk – familie/venner		X		

Har et godt netværk – fagligt/kolleger			X	
Har et godt netværk – hørelse (med i en netværksgruppe i Høreforeningen eller andet)		X (har været med til flere netværksmøder)	X (deltagelse i en netværksgruppe)	X (indmeldelse i Høreforeningen)
Er bevidst om og anvender hørestrategier (aktivt forbedrer mulighederne for at høre i kommunikationssituationer)	X (medarbejdere har afsluttet kurset)	X (medarbejder en deltager på kurset)	X (ex: der tages kontakt til CBG for deltagelse i et BDA-kursus)	
Har de høretekniske hjælpemidler, der er brug for	X (medarbejder og kolleger har vænnet sig til brugen af høretekniske hjælpemidler)	X (høretekniske hjælpemidler sættes op til brug og tages i anvendelse)	X (eksperter kontaktes og der aftales et møde)	
Kan overskue arbejdsopgaver	X			
Der er sket store positive livsforandringer		X		
Der er sket store negative livsforandringer	X			

Problematiske relationer - kolleger			X	
Problematiske relationer – familie/venner		X		
Ser lyst på tilværelsen		X		
Kan 'slippe' vanskelige situationer igen			X	
Følelser og tanker kører rundt og er svære at få styr på	X  (ex: der søges om deltagelse på et mindfulness-kursus)	X  (medarbejder en deltager på kurset)	X  (medarbejderen har gennemgået kurset og integrerer ny viden/nye rutiner)	
Tager 'lyttepauser' og finder energi			X	
Egenfortællingen er præget af positive historier		X		
Føler sig ofte uretfærdigt behandlet			X	
Vælger samvær med andre mennesker fra for at håndtere hørelsen (isolerer sig)		X		

Begribelighed	I høj grad	I nogen grad	I lille grad	Slet ikke
Er klar over hvorfor relationer er gode/dårlige		X		
Føler sig forstået i kommunikation med andre		X  (integrere hørestrategier og arbejde med kommunikationskultur)	X  (blive bevidst om, hvad man kan gøre i organisationen for at forbedre kommunikationen)	
Misforstår ofte kolleger	X  (blive bevidst om, hvad man kan gøre i organisationen for at forbedre kommunikationen)	X  (integrere hørestrategier og arbejde med kommunikationskultur)		
Forstår egne reaktioner		X		
Forstår hvorfor store forandringer er sket i livet	X			

Meningsfuldhed	I høj grad	I nogen grad	I lille grad	Slet ikke
Livet er meningsfuldt og		X		

bringer glæde				
Opgaver er meningsfulde			X	
Engagerer sig i sociale aktiviteter på arbejdet				X
Engagerer sig i energiopbyggende aktiviteter i fritiden		X (afprøve aktivitet)	X (overvej, hvad der kan give energi i fritiden)	
Er motiveret til at ændre situationen		X		
Høretab er årsag til krise (føler man har mistet noget)	X			
Udlever sine drømme			X	

Figur 9-4: Dialogværktøj til at arbejde med stressreduktion hos erhvervsaktive med høretab

I en situation, hvor en medarbejder med høretab oplever stress, tænkes dialogværktøjet som en støtte i arbejdet med den positive spiral. Tanken er, at værktøjet kan fungere som en slags tjekliste, der hjælper HR-konsulenten til at fastholde en målsætning i processen. Ved et første møde mellem HR-konsulenten og medarbejderen med høretab, vil en gennemgang af emnerne ske ved at stille mere dybdegående spørgsmål, der omhandler de forskellige emner, således at HR-konsulenten kan vurdere, hvor der skal markeres i skemaet. Her kan nogle af spørgsmålene opstillet i den primære analyse med fordel tages i anvendelse. Dialogværktøjet støtter i tilsvarende grad den hørehæmmede og stressramte medarbejder, idet en positiv spiral igangsættes gennem en struktureret proces, der gennem en fælles indsats fastholdes og udvikles med afsæt i punkterne i skemaet.

Ved næste møde er tanken, at man ikke blot arbejder videre med de emner, der havde et negativt udfald, men at man forsøger at bruge emnerne med et positivt udfald til at fastholde de gode ting i medarbejderens liv, og således kan HR-



konsulenten være med til at finde områder, hvor der kan opbygges energi og modstandsdygtighed. I processen er det derfor vigtigt at notere sideløbende, hvad det specifikt er, der gør sig gældende i netop denne persons liv: hvilke arbejds- eller fritidsrelaterede aktiviteter, der giver mening for vedkommende; hvilke relationer, der er positive; hvilke strategier, der fungerer som pusterum og som giver energi osv. På den måde er det muligt at arbejde med det, der giver energi og glæde i fællesskab med medarbejderen. Det er vigtigt at vurdere, hvorledes der kan arbejdes med de forskellige emner, så der kan igangsættes en handlingsplan for områderne: hvad skal der til for at ændre på forholdene, således at de støtter den positive spiral? Hvilke forhold er akutte og alvorlige? Hvilke mål skal vi arbejde efter, og hvilke mål skal vi sætte for forløbet? Osv. Skemaet tænkes også anvendeligt som overleveringsværktøj i en situation, hvor vedkommende henvises videre til en erhvervpsykolog, såfremt det vurderes, at processen skal foregå dér, eller at den er for vanskelig at håndtere internt i organisationen.

Som vist i skemaet er tanken, at der gennem en proces kan justeres på, hvor der markeres indenfor de enkelte emner, såfremt der sker ændringer i personens liv. Måske handler det om, at der er brug for flere høretekniske hjælpemidler, og det kan være et fokusområde, der arbejdes med mellem to møder. Eller kontakt til Høreforeningen kan bidrage til et godt netværk, der kan være en støtte i forhold til høreudfordringer. Disse to emner kan meget hurtigt flytte sig fra et negativt udfald til et positivt udfald, og det kræver ikke den store indsats. Problematikker, der omhandler kontrol over tanker kræver en lidt anderledes tilgang, der fx kan være at føre logbog for at finde ud af, hvordan man reagerer i forskellige sammenhænge. Men det kan også være, at medarbejderen kommer på et mindfulness-kursus for at lære at håndtere svære tanker og følelser. Det vil altså i høj grad handle om, hvad man når frem til i dialogen, og hvad der passer til den enkelte medarbejders temperament.

Den sidste del af skemaet, der handler om meningsfuldhed, kan være med til at afdække, om der er risiko for, at medarbejderen er på vej ind i en depression, som ofte hænger sammen med både høretab og stress. I det tilfælde HR-konsulenten skønner, at det er tilfældet, må der laves en vurdering og en handleplan, der tager højde for dette med eventuel inddragelse af andre instanser.

Der er lavet aftale med Castberggård om, at dialogværktøjet bliver testet som et procesværktøj i forbindelse med BDA (Bevar Dit Arbejde) i perioden september 2015 – maj 2016. BDA er et kursusforløb på Castberggård, der har fungeret siden 1993, og som giver medarbejdere med høretab muligheder for at få redskaber til at fungere godt på arbejdspladsen (<http://www.cbg.dk/jobcenter/nedsat-hoerelse/holdforloeb-bevar-dit-arbejde>). En HR-konsulent kunne fx også foreslå et BDA-kursus som en del af en handleplan i et stressreduktionsforløb.

I evalueringen af værktøjet var ét af forslagene, at der blev lavet en spørgeguide til konkretisering af dialogværktøjet. Spørgsmålene skal fungere som inspirationskilde for HR-konsulenten, der ønsker at italesætte en kategori som en potentiel stressudløser samt de kontekstuelle og relationelle forhold, der udgør dens medbetingelser for individets balance og håndtering af stressoren. En sådan spørgeguide vil blive udarbejdet til det kommende testforløb med BDA som en videreudvikling af spørgsmålene, der blev præsenteret i forbindelse med kategorierne i den primære analyse (jf. Figur 9-2).

Man kan argumentere for, at en række arbejdsrelaterede faktorer (i modsætning til hørerelaterede faktorer) kan mangle, idet fokus i høj grad har været på hørelsen. Derfor tænkes dialogværktøjet også anvendt i kombination med andre arbejdsrettede stressredskaber, hvor BrancheArbejdsmiljøRådene bl.a. har udarbejdet en række værktøjer til at sætte fokus på forskellige områder, der kan have betydning for udviklingen af arbejdsrelateret stress: prioriteringer, strategier, omgangstone, ledelse, møder osv. (BrancheArbejdsmiljøRådene, 2015). Fokus er her netop på arbejdsrelaterede forhold, der kan afstedkomme stresssygdomme. Ved at kombinere indsatsen med inddragelse af dialogværktøjet imødekommes det helhedsperspektiv, vi argumenterer for gennem hele undersøgelsen, og dermed anerkendes det, at stress er en kombination af forskellige forhold, der måske mere end at handle om udelukkende arbejdsmæssige eller private forhold i højere grad handler om et helhedsindtryk og særlige forhold, der går igen gennem livet som et hele. Inddragelse af dialogværktøjet åbner mulighed for at ansvaret for at en stressreduktionsproces kan igangsættes og fastholdes i organisationen. Ansvaret bredes således ud fra udelukkende at ligge på den enkelte medarbejders skuldre til at blive et fælles ansvar, hvor HR-konsulenten er bindeleddet mellem organisation og medarbejder.

## 9.15. ANBEFALINGER

Anbefalingerne nedenfor tager afsæt i den teoretiske ramme og analyseresultaterne. De kan overvejes og tages i anvendelse af HR-konsulenter ved begyndelsen af et stressreduktionsforløb i samarbejde med hørehæmmede medarbejdere. Anbefalingerne og dialogværktøjet, jf. Figur 9-4, tænkes anvendt i sammenhæng.

### 9.15.1. ANBEFALINGER TIL HR-KONSULENTEN FORUD FOR OG I SAMTALESITUATIONEN:

- Fokus på den personlige hørehistorie
- Fysiske rammer som placering i rummet og lysforhold (HR-konsulenten bør fx ikke sidde i skygge/modlys med ryggen mod vinduet, da ansigtet/munden således vanskeligt aflæses)

- Tydelig auditiv og visuel kommunikation (tydelig – ikke høj – tale, tydelige mundbevægelser, ikke skjule munden osv.)
- Nedbringe eventuel forventningsangst ved at forberede personen med høretab så godt som muligt på forløbet, og det man vil gennemgå i samtalen – evt. ved at forberede personen skriftligt inden mødet
- Spørge ind til brug af høretekniske hjælpemidler og tage dem i anvendelse, hvis ønsket
- Spørge ind til tinnitus og træthed og tilrettelægge et møde, så der tages hensyn til dette med indlæggelse af pauser
- Forsøge at skabe en afslappet stemning og sikre, at der ikke er støjkluder, kommer uventede advarselsslyde eller andre forstyrrelser, der kan skabe forstyrrelser, anspændthed og usikkerhed hos personen med høretab
- I samarbejde med medarbejderen lægge en strategi for, hvad man gør, hvis der er dårlige lytte-/lyd- og lysforhold
- Skrive et referat af samtalen, så der er enighed om aftaler og en fælles referenceramme ved næste møde

#### ▪ **ANBEFALINGER TIL HR- KONSULENTEN MED FOKUS PÅ AT REDUCERE STRESS:**

- Facilitere en høj grad af refleksion og bruge motivationen omkring selvevaluering aktivt – evt. ved at føre logbog eller anden form for registrering af her-og-nu oplevelser op til eller mellem møder
- Tage dialogværktøjet, jf. Figur 4, i brug, og anvende det som en både processuel og visuel referenceramme og derved aflaste hørekonsentrationen hos den hørehæmmede medarbejder
- Hjælpe personen med høretab til at blive opmærksom på, hvilke stressorer, der påvirker negativt, og således hjælpe vedkommende til at handle aktivt og navigere udenom eller reducere påvirkningen af disse stressorer (tage dialogværktøjet i brug)
- Hjælpe personen med høretab til at finde frem til aktiviteter, der både er meningsfulde, og som ikke kræver megen 'forholden sig til', for derigennem at oparbejde energi (tage dialogværktøjet i brug)

## **9.16. KONKLUSION**

Vi har gennem den primære og sekundære analyse fremstillet en række fokuspunkter, spørgsmål og modeller, som HR-konsulenten kan tage afsæt i ved et stressreduktionsforløb med medarbejdere med høretab. Vi er i undersøgelsen blandt andet nået frem til, at 'huller' i kommunikationen hos personer med høretab medfører, at den forudgående kommunikation kan bruges i mindre grad, og for at kompensere herfor må konteksten bruges i højere grad. Den tankegang har vi søgt

at operationalisere gennem en række anbefalinger til dialogsituationen, der ligeledes bygger på undersøgelsens resultater. Videre har vi konstrueret et dialogværktøj, der med afsæt i en salutogenetisk forståelse er tænkt anvendeligt i dialogsituationer hvor HR-konsulenter hjælper medarbejdere med høretab til reduktion og forebyggelse af stress. Ved at introducere værktøjet forventer vi at kunne støtte HR-konsulenten til bedre at forstå den livs- og arbejdssituation, medarbejderen befinder sig i, ligesom vi forventer at kunne bidrage til en proces, hvor den stressede medarbejder med høretab hjælpes ind i en positiv spiral, hvor stress reduceres, hvor livskvaliteten højnes og hvor energien bruges på arbejdet frem for på udfordringer forbundet med hørelsen.

## **PART 3B**

# CHAPTER 10. A QUANTITATIVE FOLLOW UP ON THE QUALITATIVE FINDINGS

The aim of applying Ecological Momentary Storytelling was on the one hand to investigate what the stressors of everyday life among the participants were and on the other hand to examine how the participants dealt with the stressors during everyday life in order to examine the nature of the stressors and the individual's ability to resist negative stressors and gain from positive stressors.

## 10.1. A QUANTITATIVE COUNTERPART

In this quantitative counterpart to the qualitative study we look for patterns in the data from the log-system to support the qualitative study. The qualitative study was aimed at voicing the different understandings of the participants as well as reflecting on and clarifying insights. The quantitative study is aimed at complementing these understandings by letting the numbers 'talk'.

One of the male participants had only very few logs as the system caused problems constantly preventing him from logging. He still was able to go through with the dialogue in which his focus in particular was on control in life and the frustration that follows the lack of control in as a result of tinnitus and hearing loss, but the log-data was unusable and has therefore been left out. The study then analyses data from five of the six participants.

In this counterpart we distinguish between *internal values*, which is 'energy', 'mood' and the SOC, and the *external values* being the experienced level of 'noise', the 'communication' meaning the conditions for communicating or communication in itself, and the factual 'number of persons in the room'.

It is important to emphasise that this study is not a statistical study despite the amount of data. The quantitative data is used in a qualitative way so to say. Each participant's ability to resist negative stressors and utilise positive stressors strategically has been investigated. Reaching this knowledge at an individual level leaves room for *indicating* contexts that may influence each other at a more general level applicable to the larger group of persons with hearing loss.

All quantitative data, on which this analysis is based, is to be found in Appendix B: Analysis of the dialogues, and the dialogues, which I refer to when I find it relevant, can be found in Appendix A: Transcripts and notes from the dialogues.

### 10.1.1. EXPERIENCE SAMPLING METHOD AS DATA-SOURCE

The system the participants used for logging their experiences was a program downloaded onto a smartphone, which they carried around during the test-week. The program was built on the idea of EMAs (ecological momentary assessments) (Shiffman et al., 2008), which means basically any type of here-and-now assessments in the subject's natural environment. This specific type of EMA is called *experience sampling method* – or merely ESM.

The ESM makes it possible for the participants to log activity, mood, energy level and SOC (sense of coherence). The SOC is a concept developed by Aaron Antonovsky, which consists of 'meaningfulness', 'comprehensibility' and 'manageability'. These components are not automatically easily understood nor projected onto everyday experiences. Therefore in the design of the method<sup>27</sup> we decided to use the words 'balance' in place of 'comprehensibility' and 'overview' in place of 'manageability' to reach insight.

As memory-anchors the participants had the option of adding text, photo and/or audio every time they made a data entry, which they were prompted to do once every hour.

### 10.1.2. THE ANALYSIS

Every participant in the study had a private web address in order to access their online log-profiles. Only the developers, the researcher, and the participants had access to the profiles and no participant had access to the other participants' profiles.

---

<sup>27</sup> The design of the method was developed on the basis of a praxis study among hearing-impaired people and in cooperation with Lisbeth Kappelgaard, whose research area is stress among schoolteachers, and stress in this case represents a common field of interest. The system was developed by Bunker43—a Danish company with interest in the possibilities of ecological momentary assessments ([www.bunker43.dk](http://www.bunker43.dk)).

The picture below is from the researcher's own data logging as an example of how an online profile appears.

**Resultater for Katja Lund**

Tidspunkt	Energi	Antal personer	Humør	Komm.	Støj	Balance	Overblik	Mening	Aktivitet	Supp.tekst	Billede	Lydklip	Ca-lokation
20. Feb 13 kl. 12:35:07	4	3	5	0	0	7	5	9	1	Arbejder i toget			
20. Feb 13 kl. 14:36:11	3	3	7	0	0	7	6	8	1	Tog			
20. Feb 13 kl. 14:36:11	5	3	8	0	0	6	6	9	4	Hjælper drenge med lektie			
20. Feb 13 kl. 15:35:09	5	3	6	0	0	5	6	8	4	Sammen med drenge			
20. Feb 13 kl. 16:43:57	8	3	8	0	0	8	8	8	4	Slapper af med dren			
20. Feb 13 kl. 17:38:33	7	3	5	0	0	6	8	7	3	Laver mad			
20. Feb 13 kl. 18:36:23	6	1	4	0	0	6	6	7	3	Rydder op, ordner skrald, vasker tøj			
20. Feb 13 kl. 19:35:37	7	3	8	0	0	8	8	8	3	Slapper af			
20. Feb 13 kl. 21:50:20	5	1	8	0	0	7	7	9	3				
20. Feb 13 kl. 22:45:52	4	1	6	0	0	7	6	7	3				
Tidspunkt	Energi	Antal personer	Humør	Komm.	Støj	Balance	Overblik	Mening	Aktivitet	Supp.tekst	Billede	Lydklip	Ca-lokation

Figure 10-1: The ESM log-data as it is displayed in the online profile.

The two columns 'Komm' (communication) and 'Støj' (noise) in Figure 10-1 are not active here, which is marked by the value '0.' The system was developed for both hearing-impaired employees and schoolteachers and these two columns are active only when a hearing-impaired person logs his or her data.

In the following analysis participants' names are changed for privacy reasons

## 10.2. 'MARIANNE'

Marianne's workday normally ends at 13.00. Her work is mainly sedentary. She has her own office with three doors, which she can open and close mainly in the interest of privacy for meetings. But the possibility of closing the doors seems also to suit her auditory needs as she can close them when she needs a 'sound-break' and open



them to let her colleagues know that they can enter and talk to her, when she has the energy.

First, Marianne has quite a few technical challenges, which causes her to end the experience logging after only two days, followed two months later by her restarting a test-week in which she also experiences many technical challenges. She experienced many more problems than the average participant did. The reasons for the increase in technical problems is not certain. However, she was the last participant to go through with the test-week and the system may have ‘caught some bugs’ despite updates and the installation of new versions.

She expresses her frustration with the system several times during the dialogue. However, the trouble with the system also occasionally becomes visible in the data. Figure 10-2 below exemplifies how mood, energy<sup>28</sup> and the SOC (balance, overview, and meaningfulness) are affected by trouble with the log-system. In this case, the phone crashes as she has just logged her experiences, which causes her to think that the data has not been saved. She tries again but this time the system crashes before she finishes; on the third attempt she succeeds. What we see in figure 2 is the difference between the first time she tries to log data and the phone crashes at 19.58.05 and the third time she makes an attempt at 20.15.22 and succeeds. By then she has spent just over 15 minutes on the log activity, which should take no more than a couple of minutes. But it still clarifies something significant as we can see how experiences of noise, good communication (1=good communication, 2=poor communication), and the number of people in the room<sup>29</sup> (she is alone) stay static from the first to the third log-attempt. The second attempt is not registered because the phone crashed half way through the logging of experiences. However, relying on the data from the first and the third log activity, the technical challenges with the phone and the ESM-system cause energy, mood, and SOC to drop between one and three values. We assume that the challenges with the system are the main reason for the decreasing values as nothing in her surroundings changes and the only activity she is involved in is logging experiences and overcoming technical issues by restarting the phone and/or the experience-sampling program. The data from the dialogue also supports this conclusion as she expresses her frustration concerning that specific situation. In addition, the text she adds in the ESM the first time she logs her experiences is: *“Have planted the newly bought plants. Checking departure times for the ferry tomorrow.”* The third time she makes an attempt to log she writes: *“Third time I try. Have planted and now checking departure times for the ferry tomorrow.”* One can understand her

---

<sup>28</sup> The level of energy is hidden in the graphical representation in figure 2, but it follows the line of balance dropping from 8 to 7

<sup>29</sup> In figure 2, the graphical line showing the number of people in the room is hidden behind the ‘communication’ line

frustration, but, at the same time, the system seems to work at least in order to log the effect of a negative stressor on cognitive states and the SOC.

## Marianne's frustration due to technical problems with the ESM

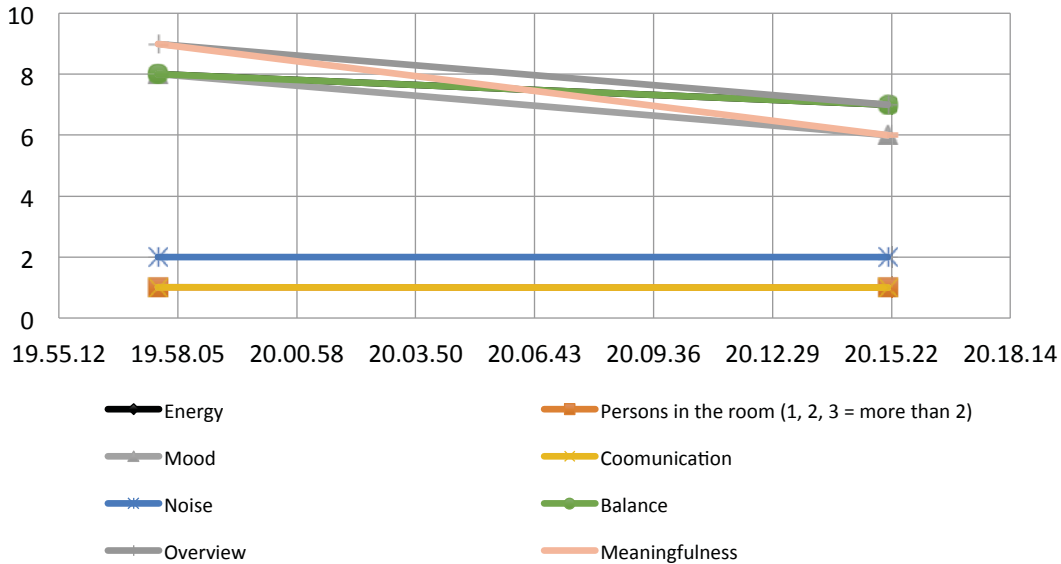


Figure 10-2: Graphical representation of Marianne's frustration over technical problems with logging momentary experiences as the ESM-system/phone crashes

Fortunately, the system did not cause problems *all* the time and therefore we have extensive logs from Marianne as she has been participating nine full days all together. She was a very engaged and dedicated participant and she was willing and able to solve many of the problems herself with support from her husband as well. I was also in contact with Marianne as well as with the system developers several times during the week of logging in order to solve problems that arose and could be solved spontaneously. Despite the technical challenges, the issues on technology and usability did not dominate the dialogue with Marianne, although reflections on different contexts did. She also notices that the system helps her to realise how tired she is when she writes a comment saying: "Going to bed now. Last time I filled in the EMA I realised how tired I was." In this situation, the system works in order to gain awareness and insight, which makes her act accordingly by going to bed. In general, she is very aware of and interested in finding out how different activities she is involved in, people she is with, and patterns she holds on to in everyday life

affect her energy level. However, the quantitative approach shows that the energy level is not the only value that is affected by the situation as we saw in the illustration above (Fig. 10-2).

During the dialogue, she reflects on a dinner with her family, which was energy consuming and affected her mood in a negative way. This is just one example of how certain situations can negatively affect conditions like mood and energy level. The illustration below in Figure 10-3 shows how different contexts and internal/external conditions can change over a day in Marianne's life.

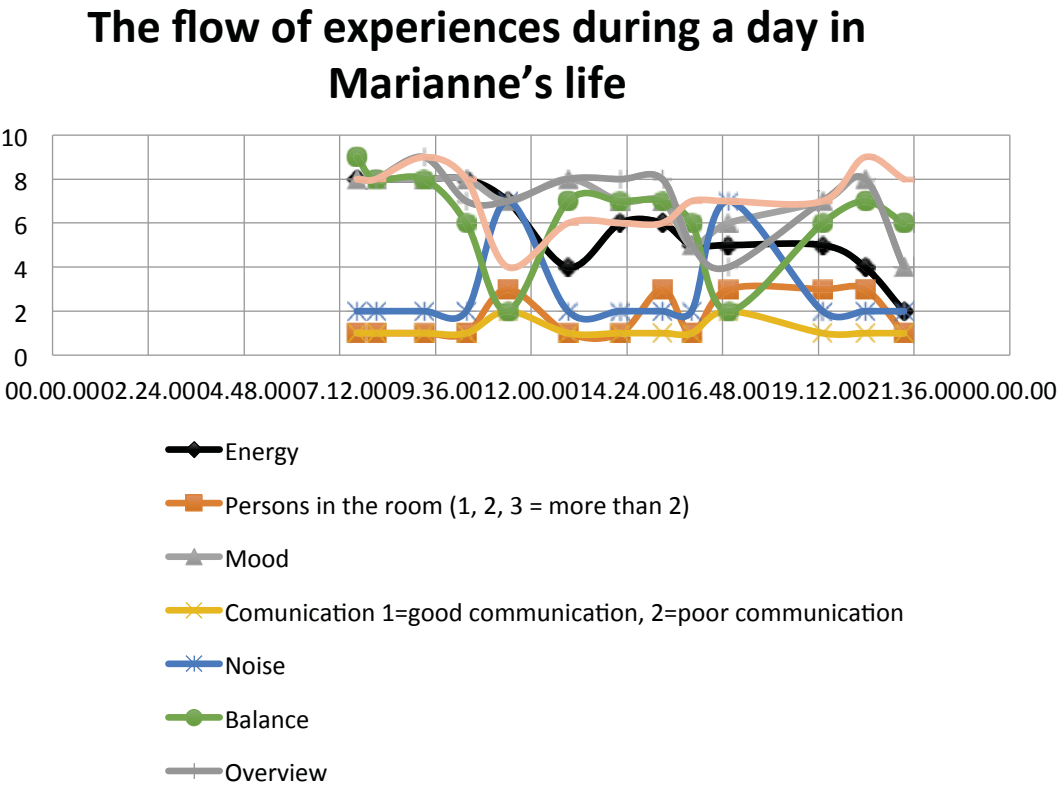


Figure 10-3: Flow of experiences

In Figure 10-3 above we can see that as Marianne wakes up she is in a good mood, full of energy and her SOC is high. She is alone, communication is good, which in this case means that no communication is going on, and the noise level is at a minimum. At around 11.30 a.m., she has lunch with her colleagues: Her general SOC drops—especially her sense of inner/outer balance drops drastically as does meaningfulness. At the same time, her energy level and mood drop a level. She experiences a lot of noise and she feels that the communication is poor. Whether this is due to poor communication conditions or problematic communication between individuals is unclear as the communication-value is used for both. After lunch the values are restored except the energy level. This is a typical picture for lunch-time on Marianne's workdays.

Marianne arrives home at around 2 p.m. (14.00) and all of her log-values are fairly positive until 4:48 p.m. (16.48) while sitting in the car with her family on her way to visit her mother. To some extent, this situation is similar to the lunch break as she experiences a high level of noise and poor communication. She is surrounded by three or more people; the noise may derive both from people talking and the car engine running. Her experiences of being in balance drops drastically as does her ability to overview the situation, but her energy level and mood stay fairly unchanged. Noise and poor communication are often represented in connection with more than two people in the room. But if Marianne is surrounded by more than two people and the values of noise and communication are positive, the values of energy, mood, and SOC seem to be affected positively as is the case during dinner with her family from 7 p.m. (19.00) and onwards.

The following illustrations (Figures 10-4 and 10-5) show a connection between listening conditions and the cognitive states Marianne experiences.

## Positive and negative listening conditions during a workday

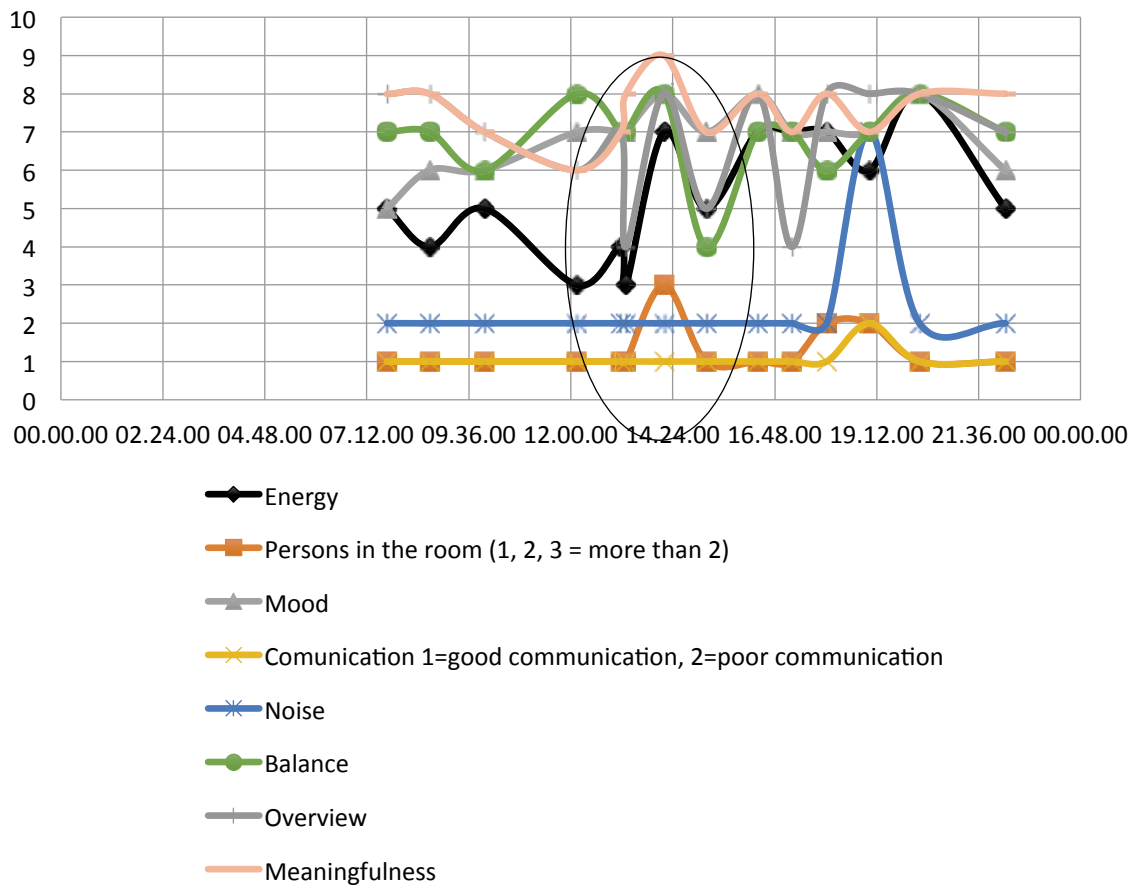


Figure 10-4: Positive and negative listening conditions during a workday

## Positive and negative listening conditions during a weekend

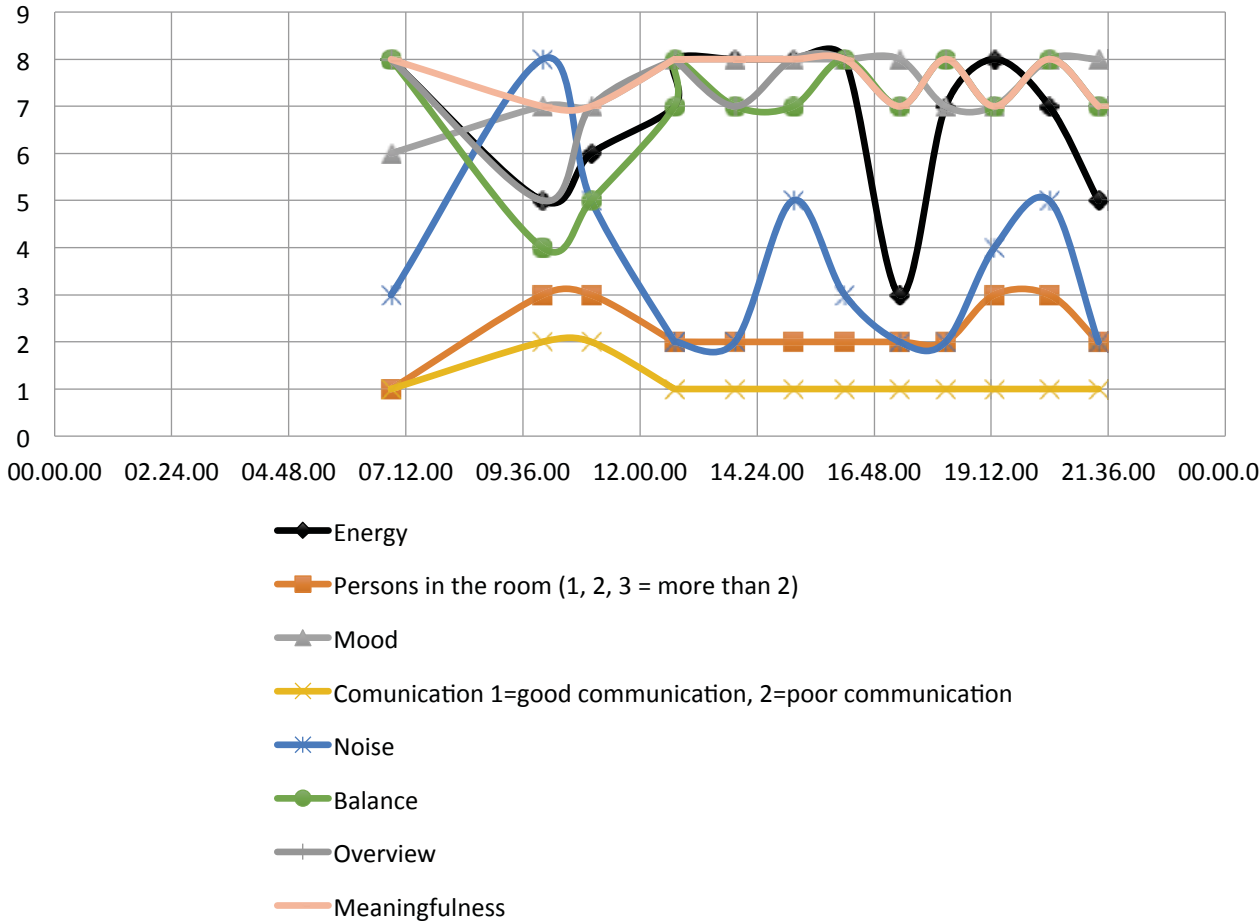


Figure 10-5: Positive and negative listening conditions during a weekend

The illustration in figure 10-4 demonstrates the different values that are measured over a workday in Marianne's life. This particular day is a Thursday. In one way, this day is different from the other workdays as she eats lunch in her office instead of in the lunchroom with her colleagues. Therefore, we do not see the same pattern

as with the usual lunch situation at work where poor listening conditions affect her cognitive states. She still experiences a drop in energy level around lunchtime. What is noteworthy in Figure 4 is the peak that indicates that two or more people are gathered in the room. This peak occurs at around 2:20 p.m. (14:20) where the presence of more than two people seems to elevate her mood and energy level as well as her general SOC. She does not experience any noise and communication is good.

The second illustration above in Figure 10-5 shows first her experiences with being on a noisy ferry in the morning around 9:40 a.m., which seems to affect all values negatively except her mood and her sense of meaningfulness. She is on her way to the family summerhouse to meet her sister, which could explain why these two values stay high despite terrible listening conditions.

She relaxes with her sister during the day in the summerhouse and in the evening around 8 p.m. (20:00) she returns home on the ferry. All the cognitive values—energy level, mood and SOC—seem to be more positively elevated on the return ride than during the ferry ride in the morning and the noise seems to bother her less. A hypothesis, which we cannot test in this analysis, is that a day of relaxing and ‘positive socialising’—here meaning spending time with another person, which is both relaxing and providing energy—strengthens the individual and provides the resources necessary to better cope with challenging auditory situations later on.

The drastic drop in energy level is caused by a sudden drop in blood sugar, which she explains in the dialogue. Another peak occurs during a weekend morning when Marianne is having an argument with her husband around 10.00 a.m. This situation must be considered as stressful and therefore a situation, which illustrates her reaction to acute stress. The argument affects Marianne negatively as the energy, mood, balance, and meaningfulness values all drop radically, which is illustrated in Figure 10-6 below. She seems to recover fairly quickly and all values are restored shortly after.

## Marianne's reaction to an argument

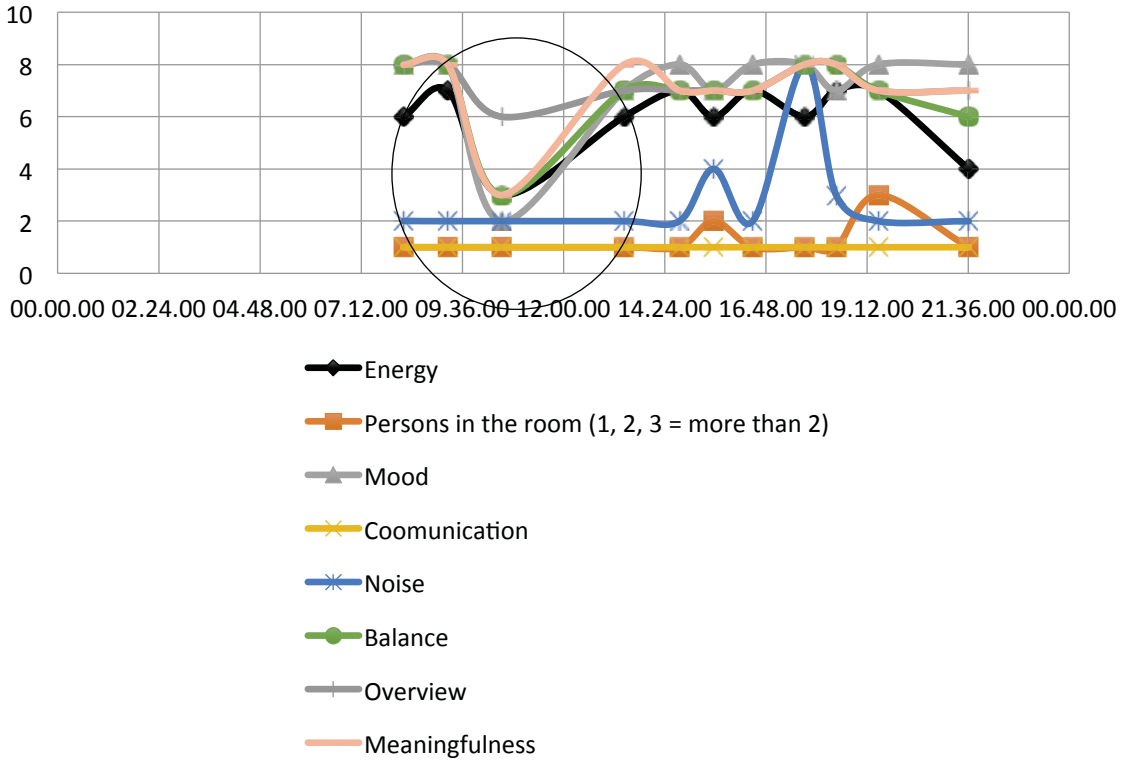


Figure 10-6: Marianne's reaction to an argument

A general observation is that the presence of other people seems to affect Marianne's energy level and mood in a positive direction. But afterwards it seems to have an equivalently negative effect on her energy level as though she uses up her energy resources while socialising. The illustrations below (Figures 10-7, 10-8 and 10-9) are all examples of this observation.



Friday

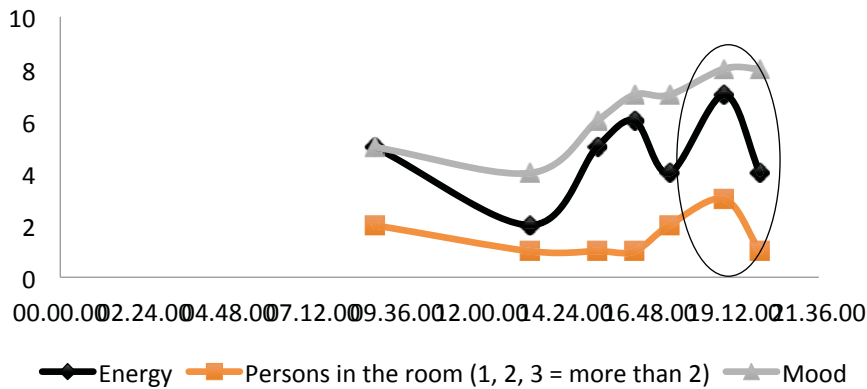


Figure 10-7: Energy level (1)

Saturday

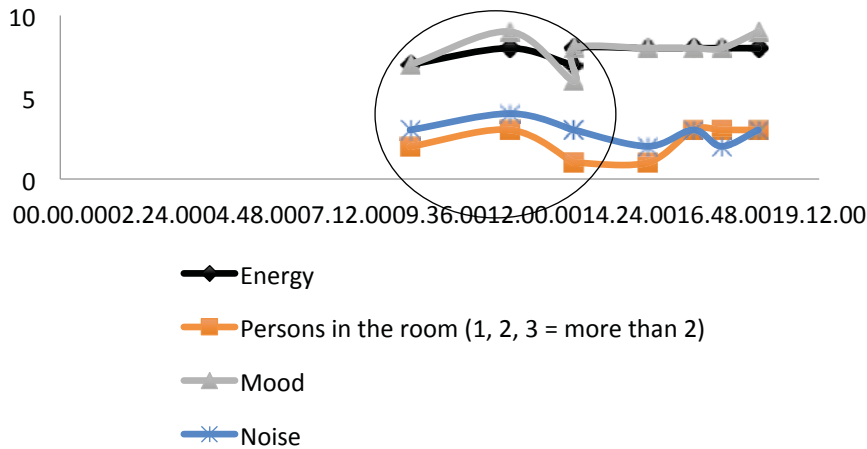
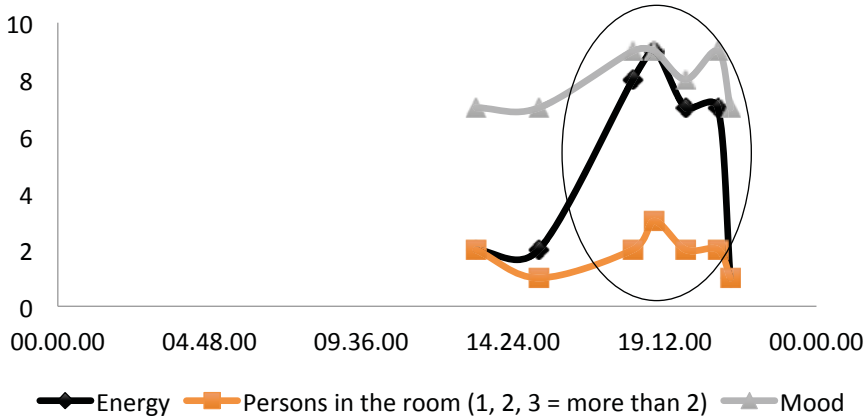


Figure 10-8: Energy level (2)

*Monday*



*Figure 10-9: Energy level (3)*

The illustration below (Figure 10-10) shows elevated values in mood and energy at around 7 p.m. (19.00) when Marianne is socialising with two or more people. This is an ideal social situation as all cognitive values are elevated, the communication is experienced as good and the noise level is low. The text Marianne has added in the log system reveals that she is dining with her family at this particular moment. An hour later, she logs more negative values along with poor communication conditions. The added text tells us that Marianne at the time of logging is watching the television news.

## An ideal social situation

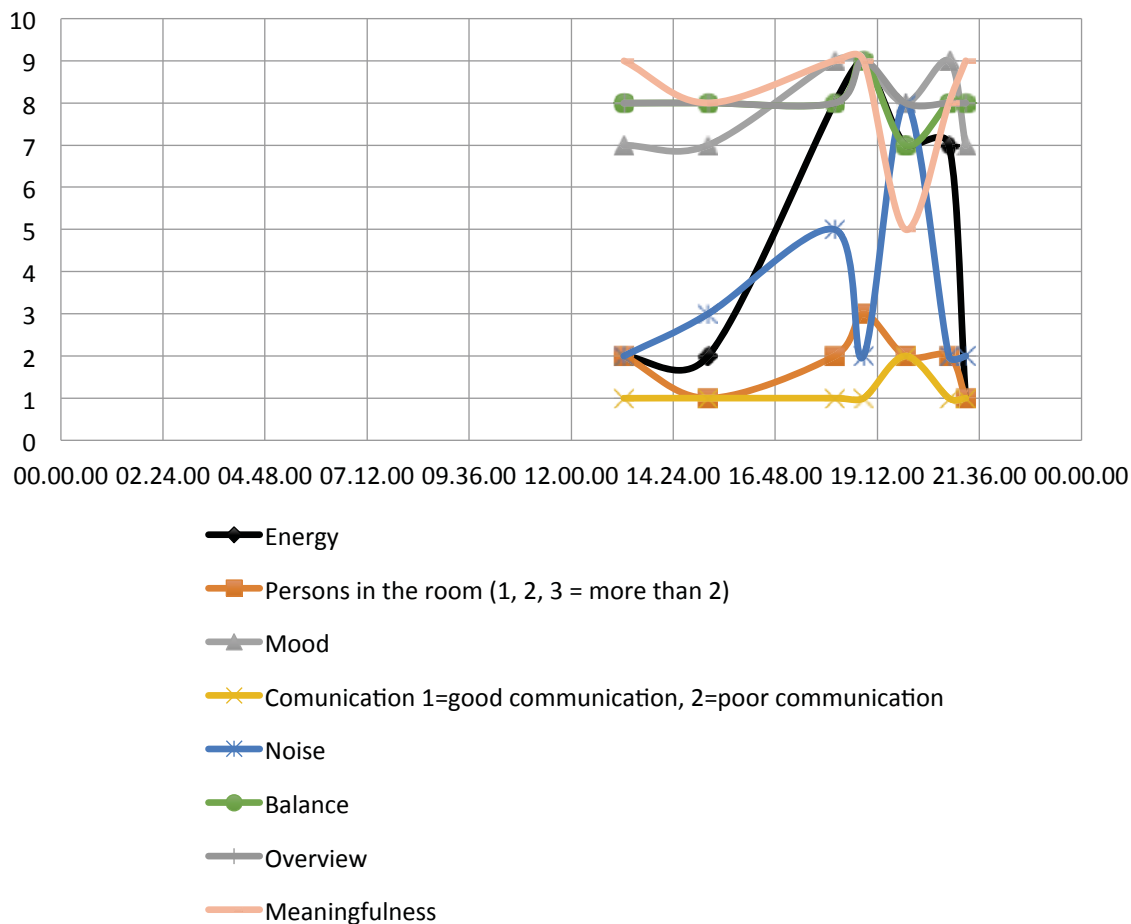


Figure 10-10: An ideal social situation

The final issue to which I want to draw the reader's attention is a situation Marianne talks about in the dialogue. She is extremely tired coming home from work at around 2:20 p.m. (14:20) (Figure 10-11 below) and she expects to be able to relax alone as a part of her daily routine. But this particular day both her sons are at home as she arrives and she experiences that the contact with them gives her energy. The qualitative analysis indicated the connection between being engaged in a meaningful activity and the build-up of energy, which this situation underpins as

she gains energy from being together with her sons. All values increase, but energy, overview, and meaningfulness increase more than mood and balance. Values drop when she is on her own again— only mood and meaningfulness stay fairly high. In general, she has high scores on mood and meaningfulness, which seem to peak when people she loves and relaxes with surround her.

## Finding energy through meaningful activities

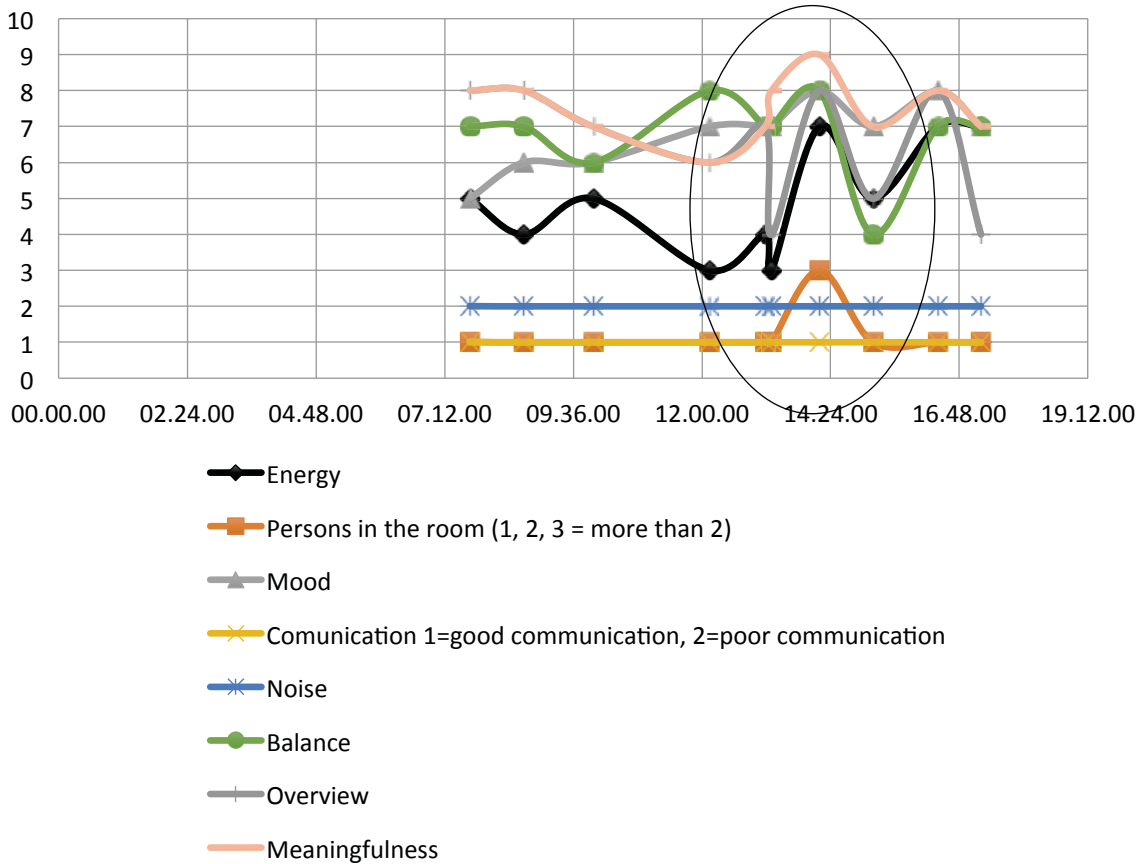


Figure 10-11: Finding energy through meaningful activities

### 10.2.1. SUMMING UP – MARIANNE

The logging activity, on the one hand, helps Marianne gain awareness of how she feels and reacts to changing situations and contexts. On the other hand, it also causes experiences of stress and negative feelings when the system crashes and causes problems.

Noise combined with more than two people in the room and Marianne's experiences of poor communication conditions affect her energy level, mood, and SOC in a negative direction. But if Marianne is with more than two people and the values of noise and communication are positive, the values of energy, mood, and SOC seem to be affected in a positive direction. A pattern also emerges telling us that after socialising her energy level normally drops.

An argument is considered a stressful situation to which she reacts strongly, which we can tell from the decrease in energy, mood, and the overall SOC (meaningfulness, balance, overview). At the same time, she seems to be able to restore the values immediately after. This tells us that we cannot gain insight in all matters—we do not know how the argument ended; if they reached some kind of agreement or not and if this had any influence on her ability to restore the values quickly.

When the communication conditions are ideal and the people she is with are people that she loves and relaxes with, all values are affected in a positive direction. In general, Marianne's reflections from the dialogue session are consistent with the data from the log-week, which also becomes obvious when dealing with the issue of meaningfulness as meaningful activities and being around people she loves are contexts that provide and restore energy for a shorter or longer period.

### 10.3. 'CHRISTIAN'

Christian is in the dialogue particularly focused on how poor communication conditions affect his energy level. In addition, he is interested in knowing how breaks throughout the day, doing sports, relaxing, and socialising affect his values—in particular his energy level. His workday starts at 6 a.m. and ends between noon (12:00) and 1 p.m. (13:00). Usually he has a weekly day off, but during the week of testing he works every day.

Christian experiences technical problems on the first day of logging experiences. Just after having been introduced to the log system, his values drop drastically, which he explains is a result of a lot of communication during start-up and some initial technical challenges, which he soon overcame. The first drop in values is illustrated as the first peak in Figure 10-12 below.

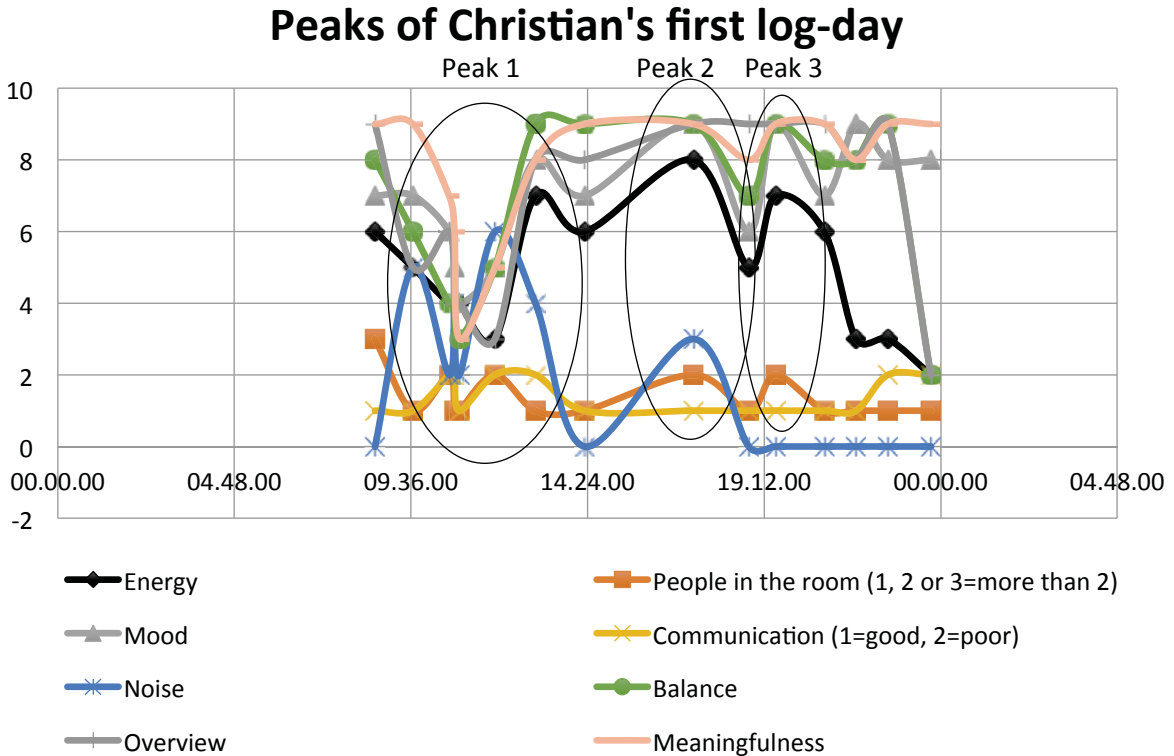


Figure 10-12: Peaks of day 1

The second and third peak in the data indicate a connection between the number of people in the room, which is two in both cases, positive experiences with communication, high energy, and mood and a high SOC. Christian has not added any extra information on the first of the two peaks, but he has taken a photo (Figure 10-13) and recorded 10 seconds of audio, which tell us that he is sitting in a parked car on an early sunny spring evening. The sound in the audio recording is the chirping of birds. He must have a passenger in the car as he has noted the presence

of two persons including himself. The elevated noise level is in this case considered as positive. We can only guess that it has to do with the birds chirping, which may have a calming and positive effect on him.



*Figure 10-13: Christian has taken a photo to recall this moment during the dialogue*

The third peak illustrates Christian's values during a visit from a friend. Also in this case his values are positive, indicating that socialising—as we learned with Marianne—can be fruitful to the experience of SOC and the increase in mood and the energy level. As with Marianne, Christian's energy level drops afterwards.

Christian talks in the dialogue about the lunch breaks as the most challenging listening situation at work. In general, his values fluctuate very much during a workday but seem to stabilise during the afternoon after arriving home. He prioritises a nap when he comes home in the afternoon, which seems to restore his values. The following illustration (Figure 10-14) supports this description of his daily rhythm and it adds information on the effect of sports and being with family on his internal values.

## A typical workday in Christian's life - 1

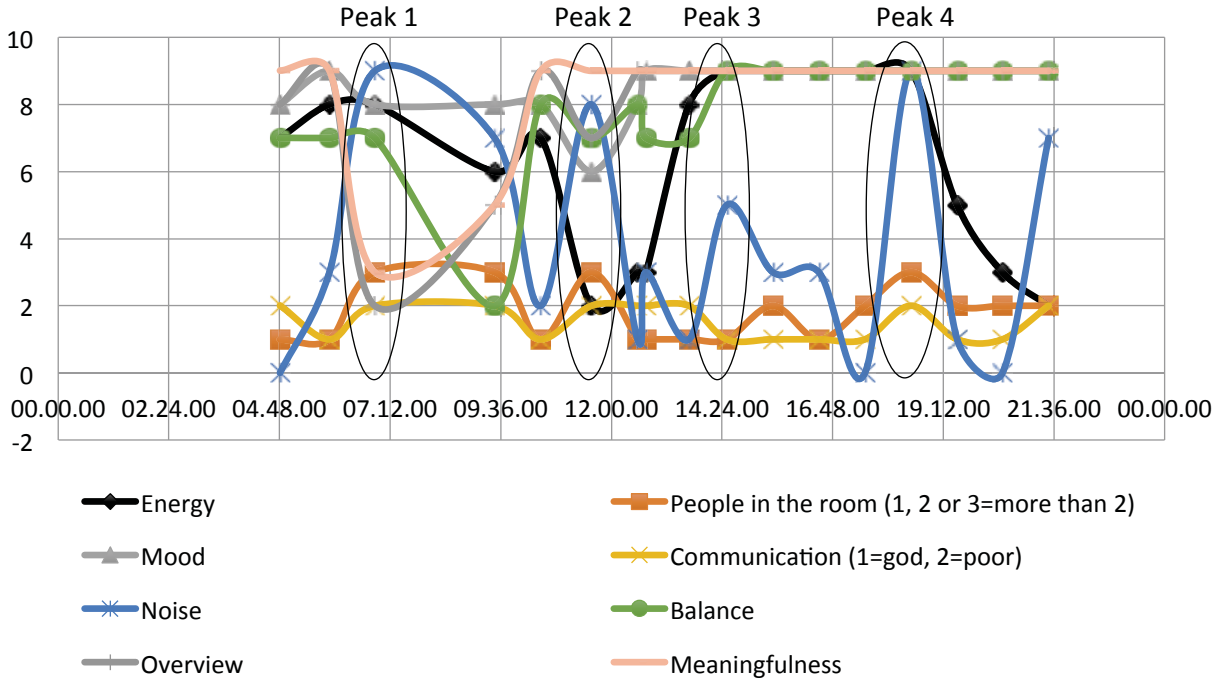


Figure 10-14: A typical workday in Christian's life - 1

The illustration in Figure 10-14 above shows a typical pattern for Christian's workdays. Just after Christian starts work in the morning the values 'overview' and 'meaningfulness' drop drastically. He has not added any extra information but he has taken a photo and recorded sound telling us that he is in a car. He has logged that he is with two or more people and his sense of meaning and overview is low. We do not know the cause of this. In addition, the noise level is high due to the engine and he experiences communication as poor.

We learn during the dialogue, that Christian suffers from severe tinnitus, which he also logs as poor communication conditions and noise. It would in this case be an advantage if the system could facilitate the clarification of this during the logging, as we are not able to see the difference in the data.



Peak 2 shows the lunch-break at work, which makes all values except 'meaningfulness' move in a negative direction: He experiences poor communication conditions, an increase in the noise level, a drop in the energy level, a drop in mood, overview and balance. This pattern is typical for Christian's lunch situations at work.

At about 1:40 p.m. (13:40), Christian wakes up from a nap after arriving home. All values have been fluctuating till this point of the day, but peak number 3 indicates a change towards a more stable condition, which lasts until bedtime. Only the energy value drops by the end of the day, which is expected.

During the afternoon, he spends time with a family member and afterwards he rows kayak with some friends until 7:30 p.m. (19:30). His values are positive with only one peak at 6:30 p.m. (18:30) when he is still on the water. He then logs an experience of a high noise level and poor communication. We do not know what is going on in the situation, but it could indicate an attempt to communicate with other rowers on the open sea.

The following illustration (Figure 10-15) is another workday in Christian's life, and there are similarities with the previous illustration (Figure 10-14). The values are fluctuating and unstable until after his nap in the afternoon around 2 p.m. (14.00). Morning and lunch breaks cause distress and negative values and the nap after arriving home in the afternoon helps him restore the values.

In the afternoon, his comments reveal that he cleans the house and listens to rock music and, in the evening, he visits his daughter around 7 p.m. (19.00), which gives him energy. Again, his energy level drops towards the evening while mood and SOC stay elevated.

# A typical workday in Christian's life - 2

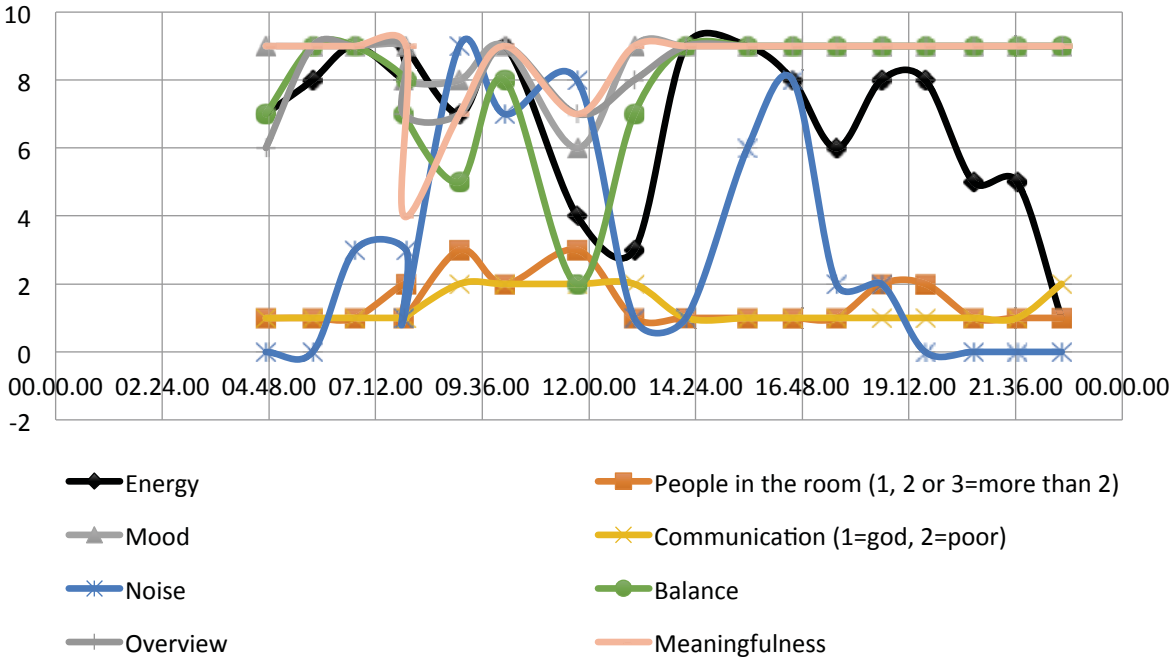


Figure 10-15: A typical workday in Christian's life - 2

This second example of a workday indicates a wide range of similarities with the first day we went into detail with. We then assume that these are examples of a typical workday and how it normally develops. The following illustration will show an atypical day and what happens to his values if he does not prioritise his afternoon nap.

## A workday without a nap

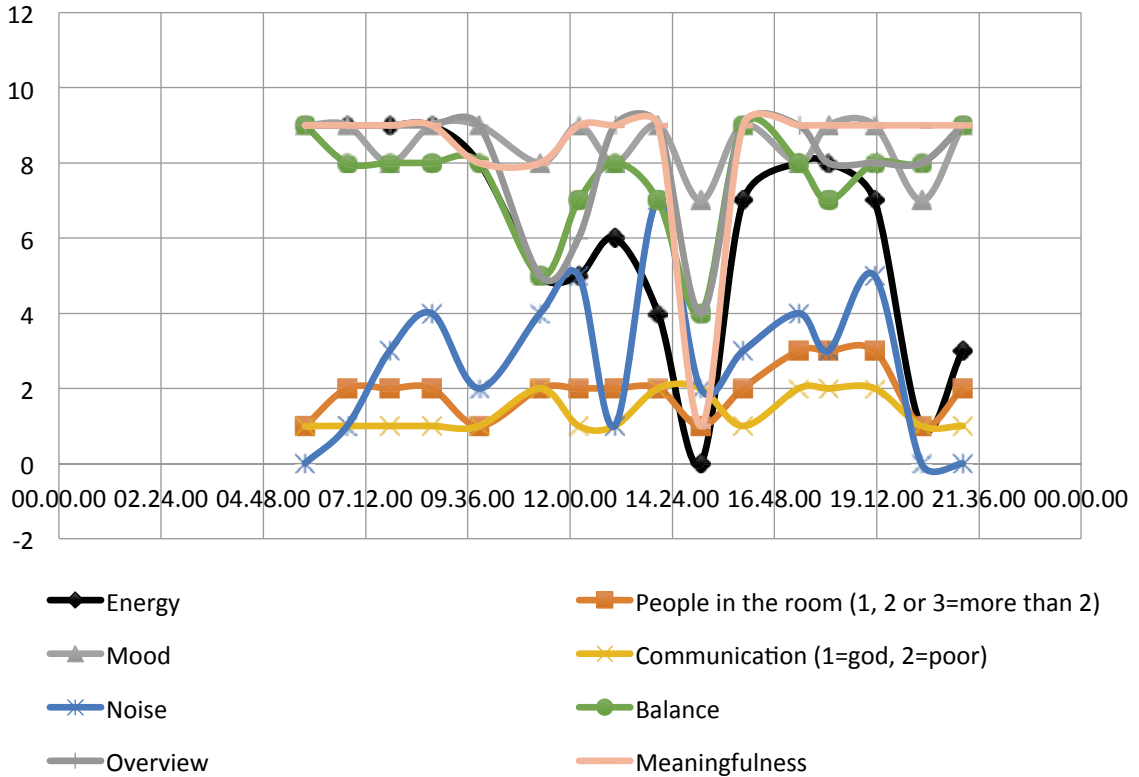


Figure 10-16: A workday without a nap

Christian's morning (Figure 10-16) seems a bit more stable than what we have seen in the previous examples until lunchtime when the pattern again becomes similar to the two previous illustrations (Figure 10-14 and 10-15). From midday until around 2.30 p.m. (14.30), the values fluctuate. But suddenly at 2.30 p.m. (14.30), which is around that the time for his usual afternoon nap, all values drop drastically: The energy level hits zero and he experiences a low SOC while only the mood stays fairly stable. He is alone but he experiences poor communication conditions, which may be a sign of tinnitus, and in the comment box he notes that he is extremely tired at that particular moment. He has a meeting an hour later and does not have time for a nap. The values become more positive again during the afternoon but seem less stable in the afternoon and in the evening compared to what we registered

on the previous two days (Figure 13 and 14). We can then assume that the afternoon nap is important particularly for a high level of energy and SOC.

### 10.3.1. SUMMING UP – CHRISTIAN

Socialising with a limited number of people in good listening conditions seems to support the development of positive values in Christian's here-and-now experiences. Doing sports and being with family and friends in his spare time are activities that seem to have a stabilising and positive effect on his experienced values. On the contrary, excessive communication, poor communication conditions, and noise cause negative values. In addition, breaks with his colleagues seem to have mainly a negative effect on his mental condition, except on his mood.

Generally, his values seem to fluctuate more in the mornings and during lunchtime until he has the chance to take a nap at around 2 p.m. after arriving home. When he fails to have a nap, he experiences a massive drop in values in a negative direction, and, contrary to the days when he succeeds in taking a nap, his values seem to stay unstable for the rest of that day.

## 10.4. 'EVA'

Eva does not work full time. She works four days every week and has Wednesdays off. On a normal day, she will start work at 7 a.m. (07:00) and leave work at around 2:30 p.m. (14:30). In the dialogue, Eva particularly reflected on how she was affected by having to join a course at work and how she felt when she did not understand what the teacher was explaining due to her impaired hearing. She felt anxious prior to the course because she knew from experience that she would miss so much information that she might as well have stayed at home.

The most striking observation in Eva's data is the energy level, which rarely exceeds 6 on a workday (9 is the highest possible value). Only on her weekly day off and on the weekend does the energy level reach higher values such as 7 or 8—usually in relation to outdoor activities when she is in the garden, riding her bike, going for a walk, etc.

In Figure 10-17 below, the data from a workday in Eva's life is presented. She says in the dialogue that she has a feeling that her values do not change much over a day, which to some extent is true. Particularly the SOC—meaningfulness, balance, and overview—stay almost unchanged over a day. Still, the data show some variation.

From around 9:30 a.m. (09:30) until 10.30 a.m. (10:30) (Figure 10-17), she is at a meeting, which affects her values in a negative direction. The energy level does not change much—it is already fairly low—nor does her mood. One should be particularly aware of how, when the number of people in the room is three or more, her experience of poor communication and a high level of noise is connected to her sense of being in balance; it is the value that drops the most (Peak 1).

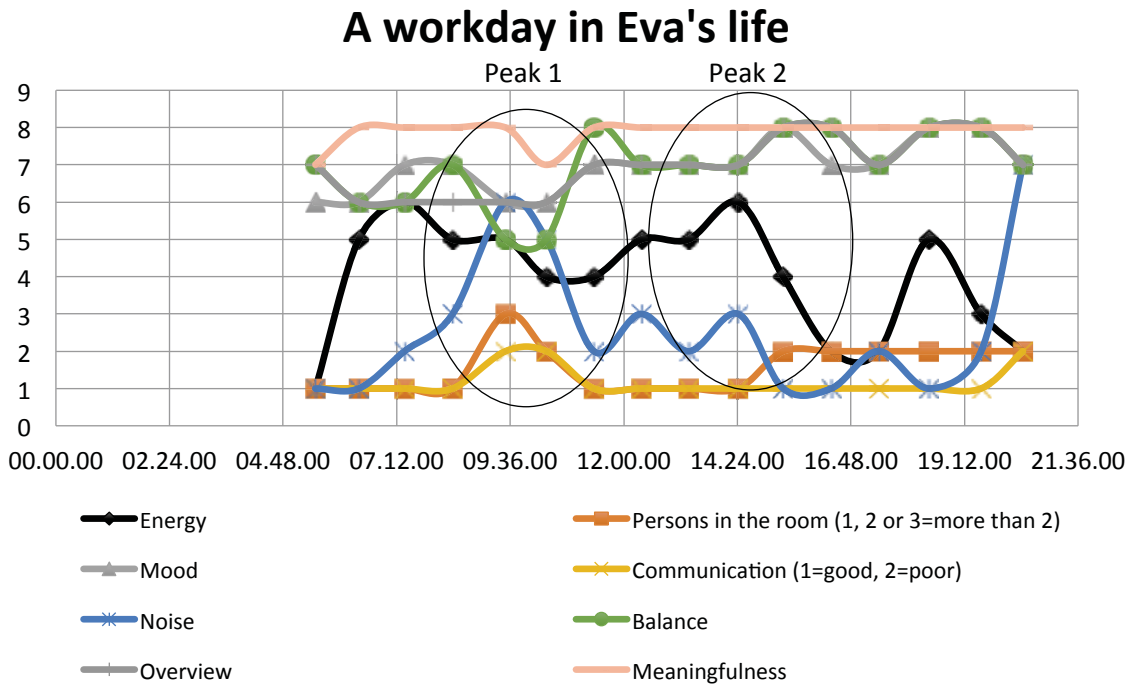


Figure 10-17: A workday in Eva's life

A second peak in Figure 10-17 happens at the end of the workday at around 2:30 p.m. (14:30) when she is leaving for home. Her energy level drops to a minimum and stays there until around 7 p.m. (19:00) when it goes up a bit just to drop back down. This is a recurring pattern, which may indicate that she spends all her energy at work just as she spends much of her leisure time and the weekly day off restoring for the next day.

If we take a look at Wednesday (Figure 10-18 below), which is her day off, we will also see that her energy level drops and stays low a great deal of the day. However, the first part of the day her energy is high, exceeding the level on workdays. Until midday, she is outdoors most of the time. Spending time outdoors generally seems to increase her energy level on other days as well. All other values besides energy level stay elevated throughout the day, which is also a general picture.

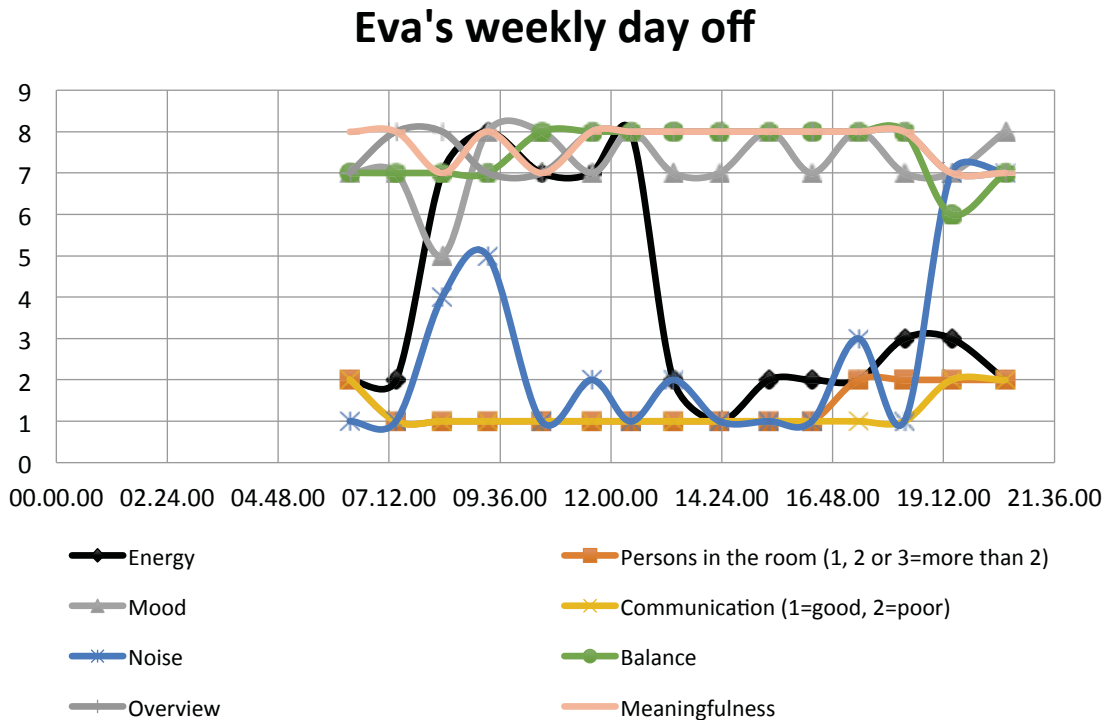


Figure 10-18: Eva's weekly day off

The only day that all components of the SOC seem to be affected negatively at the same time is the day Eva is at a work-related course (see Figure 10-19 below). She expects the course to be frustrating as experience tells her that she will find it difficult to hear what the teacher says. During the dialogue, she also says that she might as well have stayed at home because she did not feel she gained much due to poor communication conditions. Both the anticipation anxiety and the experience

itself add to the negative values. The connection between the components is again clear: Poor communication, more than three persons in the room, a high level of noise, low energy, and a fluctuating experience of SOC (balance, meaningfulness and overview).

## The effect of a course

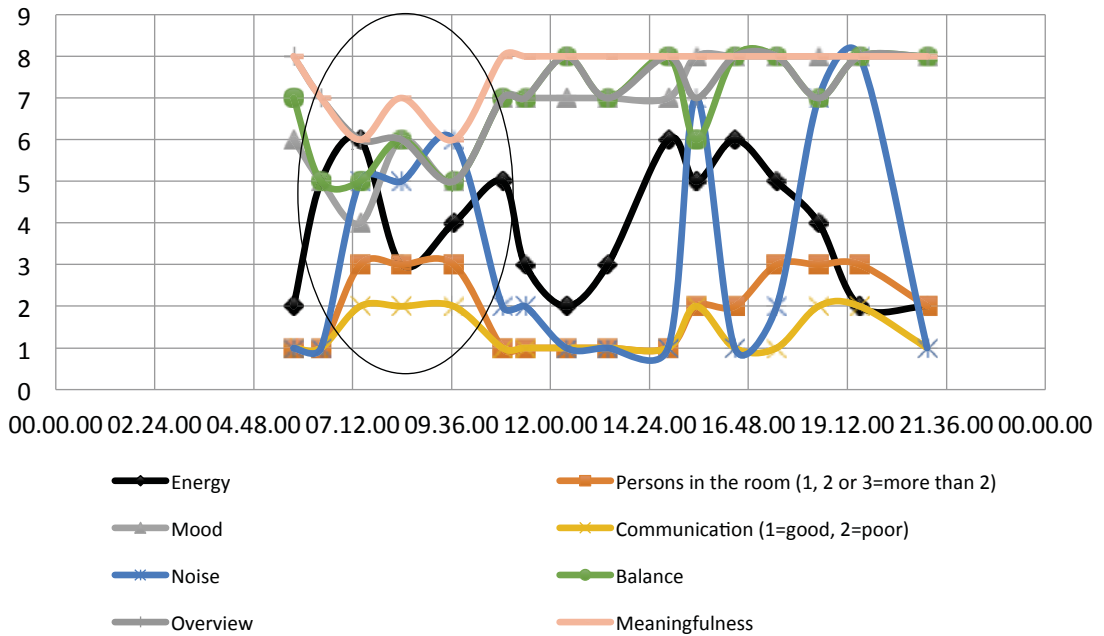


Figure 10-19: How Eva's values are affected by joining a course

After the course, her values restore to normal. What the graphics do not display is her anticipation anxiety, which she tells about in the dialogue, but her values at the beginning of the day are no different from any other day.

### 10.4.1. SUMMING UP – EVA

Eva's energy level generally varies considerably and it does not reach the high level of the scale during workdays. Only on her weekly day off and on the weekend does the energy level reach higher values. Outdoors activities in the garden, riding her bike, going for a walk, etc. seem to have a positive effect particularly on her energy level, which is the most varying value of all her values during the week of testing. Meetings at work, on the other hand, seemingly affect her values in a negative direction.

After work, her energy level drops to a minimum and stays there for almost the rest of the day on most workdays. This may indicate that she spends all her energy at work and she spends much of her leisure time and the weekly day off restoring for the next day of work.

A general observation is that Eva's mood and SOC stay elevated throughout a typical day— both on workdays and days off. However, extraordinary activities such as a course at work seem to jeopardise this stability and add to the development of negative values.

## 10.5. 'THOR'

Thor is a manager. During the dialogue, we learn that he works full time and he is responsible for his area. He often feels stressed and sometimes he has trouble sleeping. He relies on technology to wake him up during the night when he is doing the night shift and this bothers him and causes anxiety. He likes the responsibility he has at work, and the fact that he has been there for more than 25 years gives him a sense of status. He has a feeling of being a liked and appreciated person at work.

When initiating the test-week, he feels stressed because of the phone buzzing constantly. This usually happens when the participant wants to log experiences at times when the phone does not prompt them to log. He experiences that the phone buzzes again shortly after he has made a data entry, which frustrates him. This affects his values in a negative direction, which is the only major peak during the first day, where he spends most of the time reading applications. The graph in Figure 10-20 clearly shows decreasing values at this moment, which is around midday.



## Thor's first day of logging

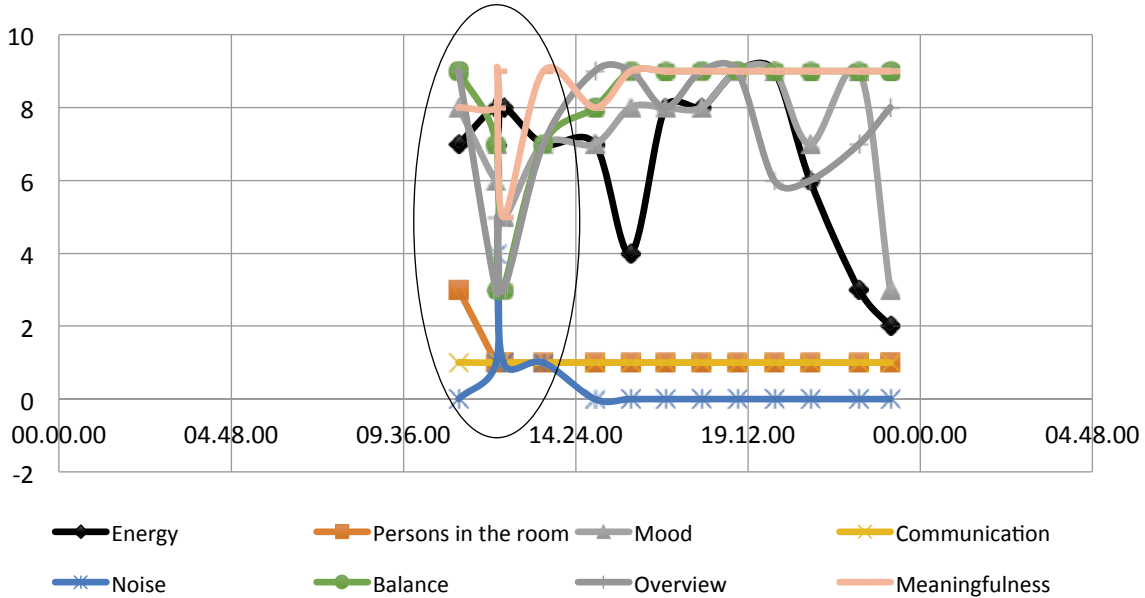


Figure 10-20: Graphical display of the log-data from Thor's first day of logging

He is alone all day and there is no communication or noise to interrupt him. The only other peak is the energy level, which drops at one stage during mid-afternoon. This does not cause any particular interest, as energy level is likely to vary over a day. Neither has he added any other information about that specific moment.

The following graph (Figure 10-21) shows a couple of peaks of a normal workday. The first peak is connected to the comment: "I feel stressed and I had a terrible sleep." The values for this particular moment tell us that energy, mood, and SOC are affected in a negative direction. Only meaningfulness stays at a high level.

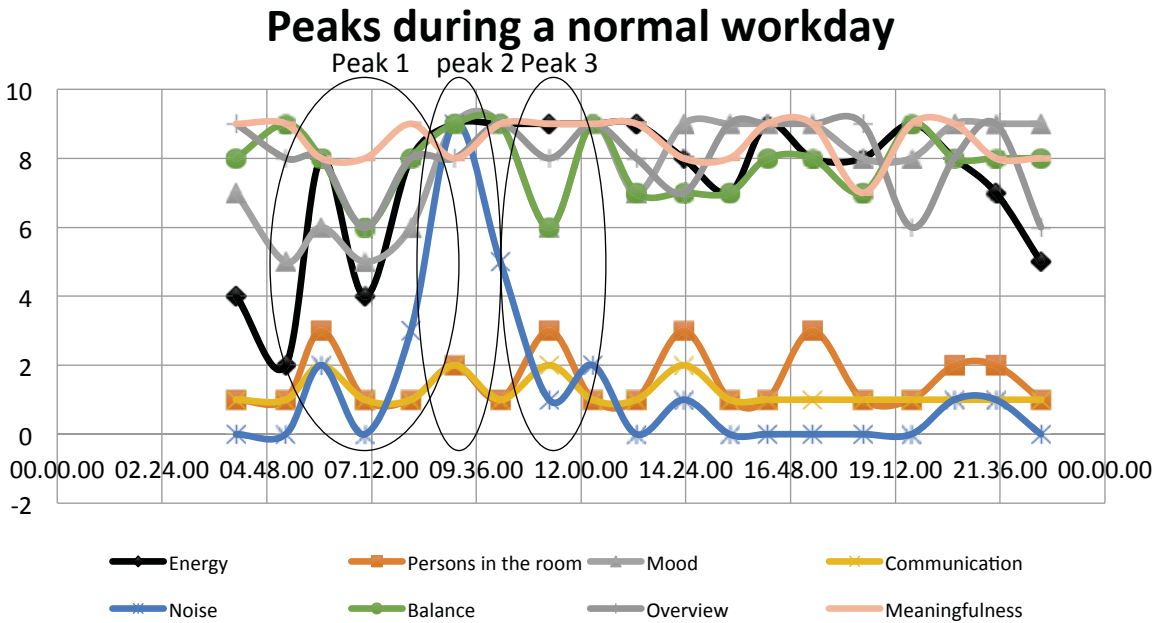


Figure 10-21: Graphical display of the log-data from a normal workday

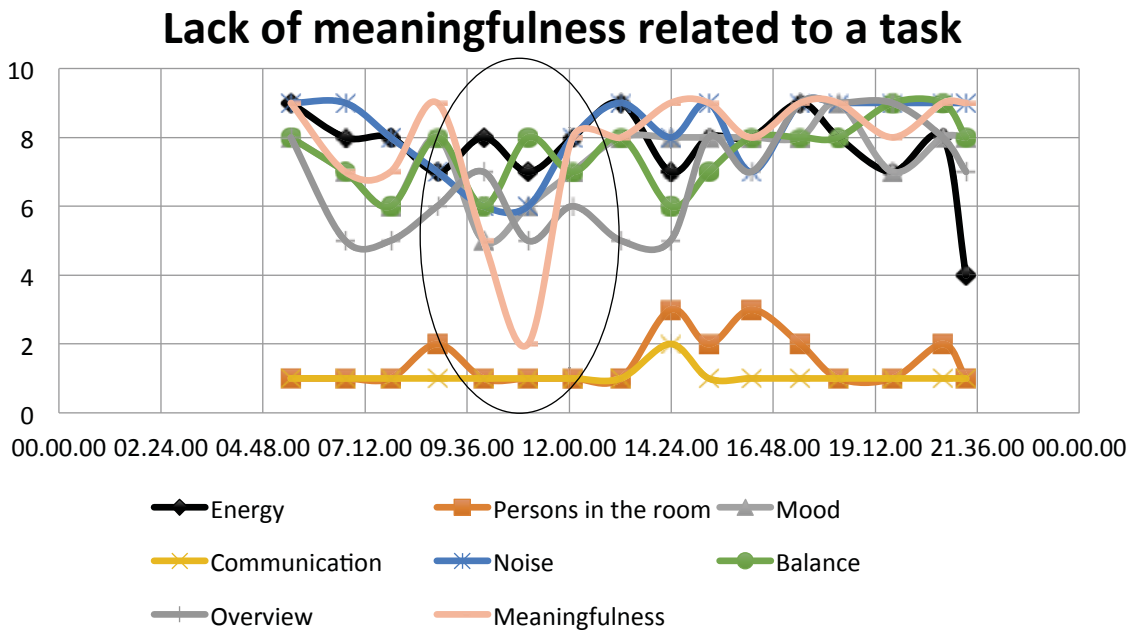
One could say that the first circle contains two peaks as, just before feeling stressed, he is with two or more people. This situation seems to affect all of his values positively or at least maintain those that were already high at a high level. In general, his SOC is stable at a high level throughout the test-week with only a few fallouts.

The second peak shows a very noisy situation in which communication is experienced as poor while he is with one other person. He has not added any text, photo, or audio and therefore we do not know the reason for these values. What is remarkable is that the other values—mood, energy, and SOC—stay very high and are unaffected by the poor listening conditions.

The third peak illustrates the lunch situation at work. At this time, his balance-level drops a bit but he is still fairly unaffected by poor listening conditions as all other values stay positive. What is perhaps the most remarkable difference between Thor and the other participants is that his energy level seems to be unaffected by challenging listening situations—both in the situation and afterwards, where it seems to stay unaffected. The reason for this is interesting and it would be something to pursue in future studies: Why do some people with impaired hearing

manage to stay at a constantly high energy level while most others are affected to different degrees by different situations?

The following graphic illustrates what Thor experiences as a boondoggle. He describes the work he is doing at that moment as a useless waste of time, which annoys him, as he has other urgent tasks waiting to be attended to.



*Figure 10-22: Graphical display of the log-data showing Thor engaged in a task, which he considers as a waste of time*

As we have seen before, Thor's other values in Figure 10-22 stay at a fairly unchanged and positive level besides the value 'meaningfulness,' which tells us something very interesting about his personality. He does not seem to let the other values be affected: If he experiences something to be meaningless, this is what he will enter in the log system while the remaining values stay positive. This ability may be crucial to whether one develops stress or not.

By clustering the three graphs below (Figures 10-23, 10-24, and 3-25), the intention is to make it clear to the reader how different Thor's workdays and weekend-days are. First, we have Friday, which is the most stable day during the test-week according to the numbers: All internal values stay elevated all day with only a small drop in overview at one stage during the afternoon.

After Friday, we see the data from Saturday. In the beginning of the day, the values are stable, but after midday his energy level drops drastically and the other internal values vary more than usual from late afternoon and throughout the evening.

Sunday also presents a quite different data-pattern than on the Friday as his values vary considerable until midday. He is doing static work, which is all we know about the situation. Just before lunchtime, he has logged his activity as 'socialising,' which seems to influence his values in a positive way. Despite this, his mood drops after socialising but is restored shortly after, and the values stay fairly stable and positive for the rest of the day. In the dialogue, he talks positively about the family's weekend activities, which reveals that the general experience is positive for both workdays and weekend-days. Why the workdays and the weekend-days differ as regards the stability of the values may have more to do with structure on workdays and less structured activities and more spontaneity during the weekend. This is a hypothesis based on the results from the quantitative analysis and from Thor's reflections during the dialogue, which emphasises the importance of structure in his life.

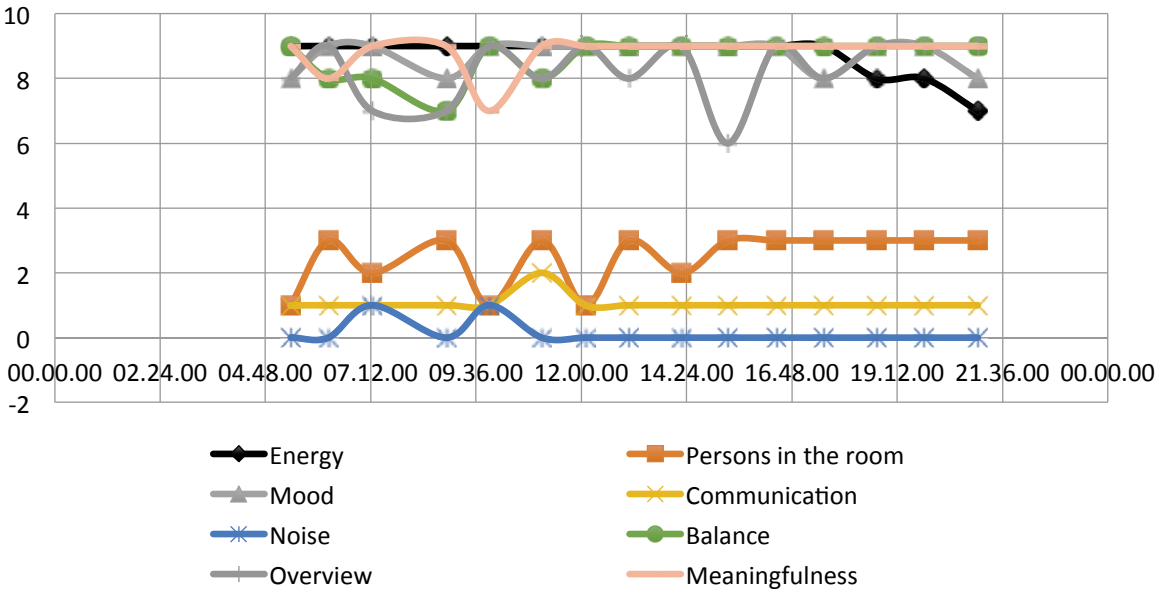


Figure 10-23: Graphical display of the log-data showing a day with a low degree of variation in internal values

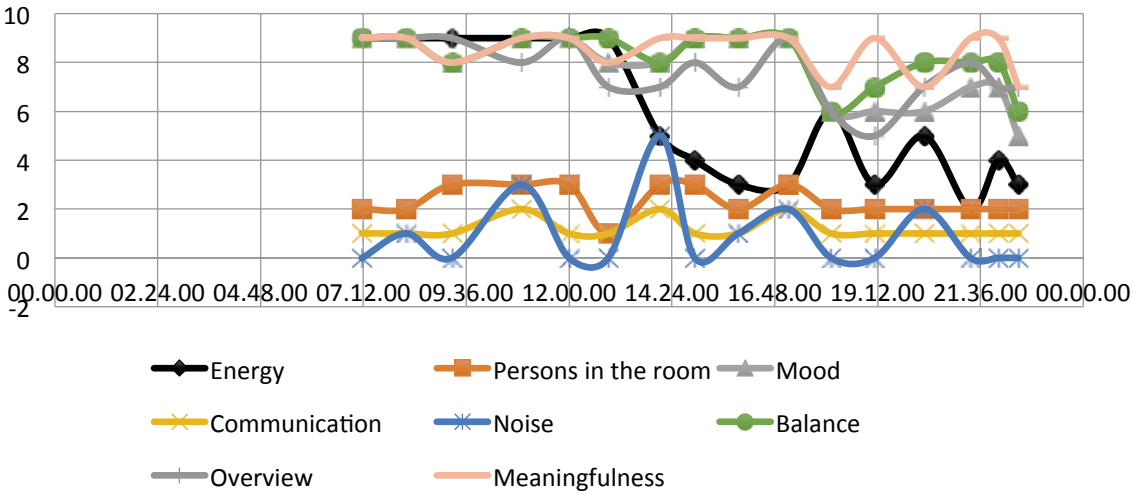


Figure 10-24: Graphical display of the log-data showing a day with a higher degree of variation in internal value

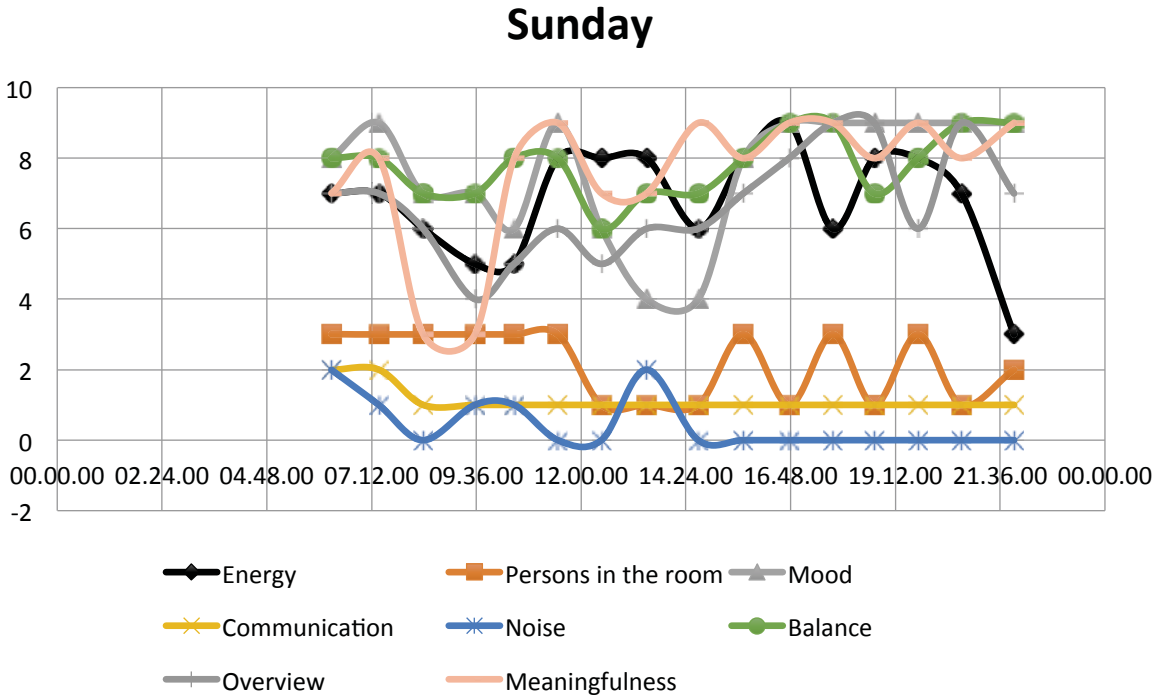


Figure 10-25: Graphical display of the log-data showing a day with a low degree of variation in internal values

### 10.5.1. SUMMING UP – THOR

Thor often feels stressed and sometimes he has trouble sleeping. Technical challenges with the system affect his values negatively, as do poor sleep and feelings of stress.

Socialising seems generally to affect his values only positively. His values and especially his SOC and the mood are at a constantly high level during the test week, interrupted only by variations as a result of his feeling stressed and anxious due to lack of sleep and having to rely on technology, which he has experienced did not work properly.

His values are generally more stable and positive on weekdays than during the weekends, which are dominated by less structure.

## 10.6. 'MONA'

Mona is a researcher at a university. She used to be a government employee in a communication-based role, but when she got the opportunity to do a Ph.D. she decided to see what it would be like to have fewer colleagues and less daily communication while at the same time following her dreams. Around the same time, she decided to move into a one-room apartment from a residence where people knew each other well and socialised more than in the apartment building she lives in now, where people do not know each other well.

In the dialogue, she reflects on her solitude, which she became aware of during the test-week when logging the number of people in the room. She realised—and was a bit shocked—by the fact that most of the time during the test-week she would log that she was by herself. Despite this Mona's data is fairly stable and her values are generally positive.

In the graph (Figure 10-26) we see that there are two minor peaks during this day. The first peak is in her lunchbreak where energy and mood decrease two to three levels. The second peak happens as she arrives home and sits down to read the paper around 4:40 p.m. (16:40). She has not added any extra text to explain the change in values.

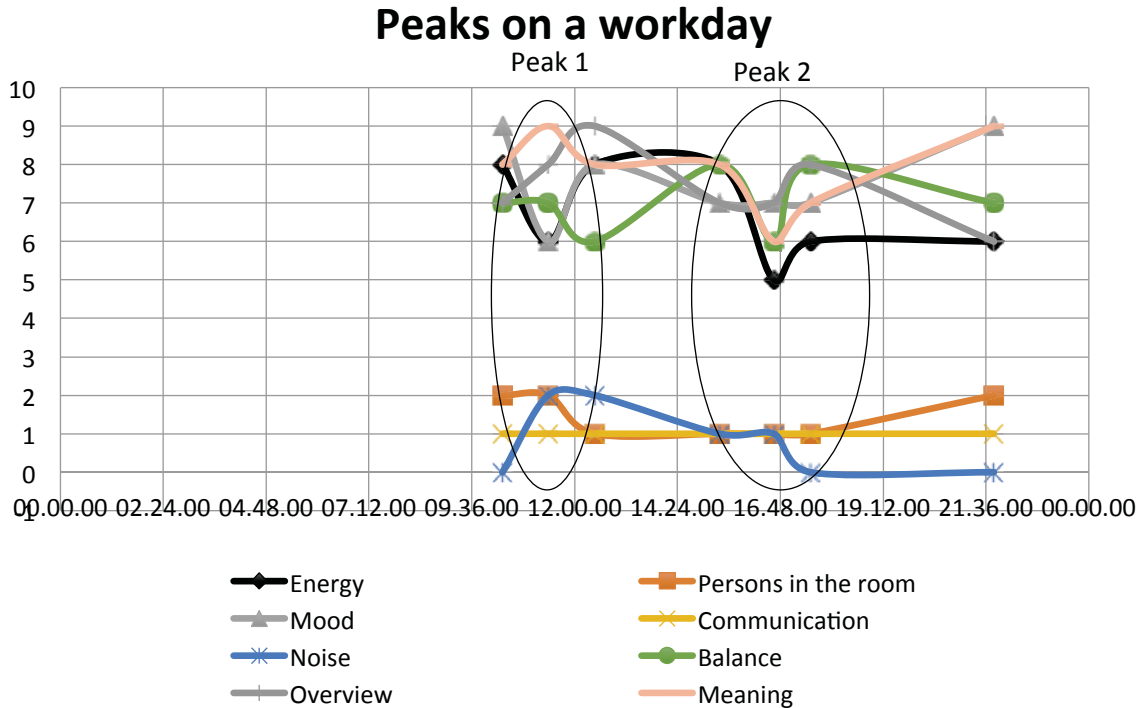


Figure 10-26: Graphical display of the log-data showing peaks on a workday

The following graph (Figure 10-27) indicates a connection between the presence of other people and Mona’s energy level. This is interesting, as she has made some choices in her life that have caused less interaction with other people concerning career and in terms of housing. The presence of other people seems here to have a positive influence on her energy level while at the same time it seems to drop when she is by herself again. We have seen this pattern in several of the participants in the test.



## A workday in Mona's life - the connection between values

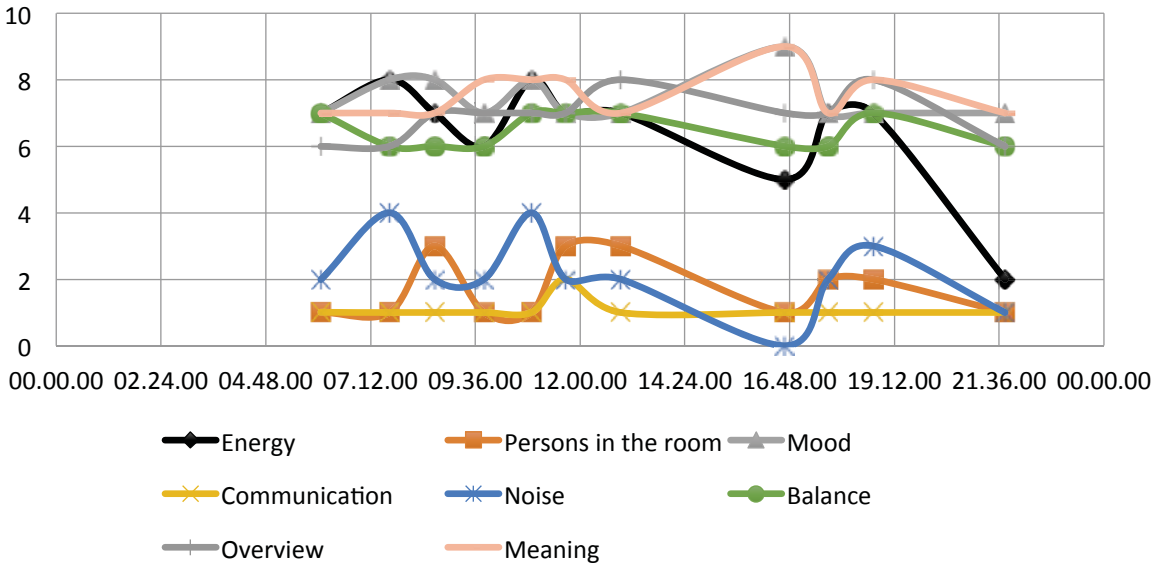


Figure 10-27: A workday in Mona's life—the connection between values

The SOC and mood is generally high and not particularly following the rhythm of energy level and the presence of other people, which is why two other graphs are added to underline this connection (Figures 10-29 and 10-30). But first, we will take a look at a full weekend-day, which she spends by herself (Figure 10-28).

# A weekend-day in Mona's life - the connection between values

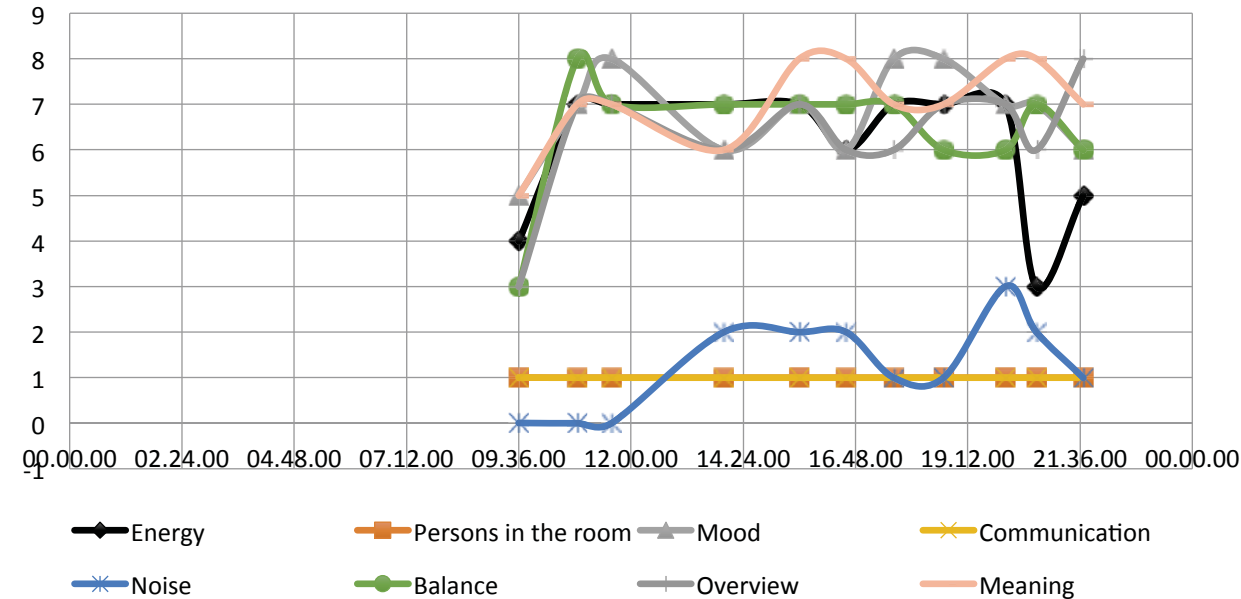


Figure 10-28: A weekend-day in Mona's life - the connection between values

The SOC and the mood seem to follow the pattern of all the other days in Mona's week of logging, which in general means very positive values except in the beginning of the day when reading the paper (a photo taken at this time points at this being the activity). What is especially interesting when comparing a workday and a weekend-day is how the number of people Mona is surrounded by seemingly affects her energy level. In order to be able to see these two components properly, they have been extracted in Figures 10-29 and 10-30 below.

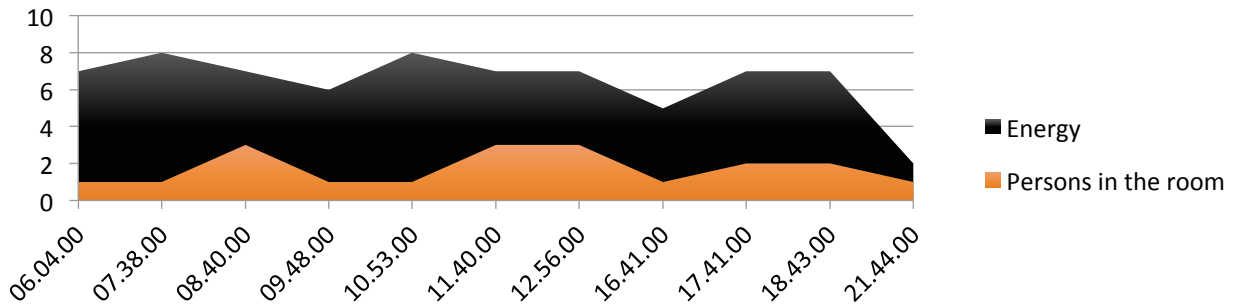


Figure 10-29: The connection between people in the room and Mona's energy level on a workday

In Figure 10-29 we notice how Mona's energy level seems to increase every time she is together with other people and decrease when she is alone. This pattern becomes particularly obvious when we look at the following Figure 10-30, where she is alone all day and where her energy level hardly varies except in the evening, when one could expect most people's energy level to drop.

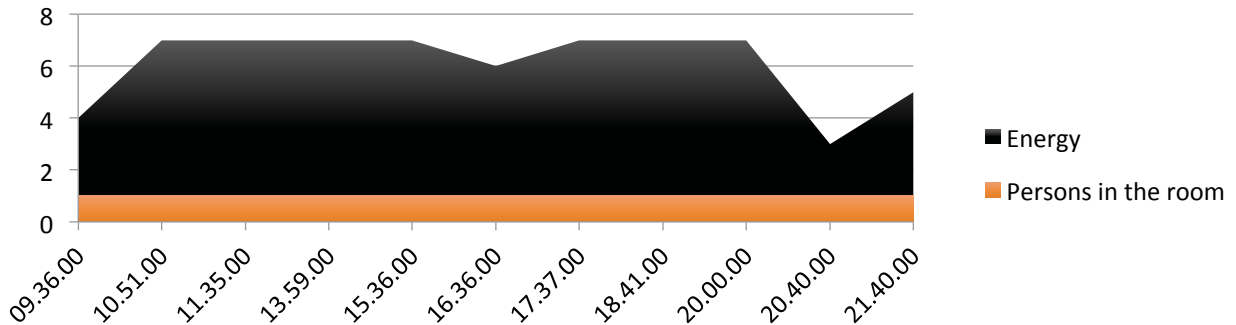


Figure 10-30: The energy level on a weekend-day where Mona is by herself

Even though the energy level is stable and high during the day where she is alone (Figure 10-30), the positive influence other people seem to have on her energy level may be an indicator of the beneficent effect of other people on her energy level and thus the potentially destructive effects of increased isolation. During the dialogue, she reflected on her options for changing her situation and for possibly moving back to the residence where she used to live, which would give her more opportunities to socialise in her spare time and during the weekends. The logging

also increased and supported her awareness of the importance of being able to withdraw from other people during a workday as socialising ‘costs’ energy afterwards.

### **10.6.1. SUMMING UP—MONA**

Mona’s data are fairly positive and stable throughout the whole test week. Especially the SOC and the mood are generally high.

The presence of other people seems to have a positive influence on her energy level while at the same time energy seems to drop when she is by herself again. Socialising thus both increases her energy level when she is with other people and decreases her energy level afterwards.

The method helps increase awareness of potential isolation as logging the presence of other people reveals a pattern of being alone and being with others as well as the effect solitude and socialising has on her energy level.

## **10.7. CONCLUSION**

First, the ESM (experience sampling method) and the logging activity caused a level of stress in all participants, but, at the same time, the system seemed to work as intended as it helps explain the correlation of different contexts on experienced values among the participants.

The data seems to support the findings from the Grounded Theory analysis of the dialogues. But we also have reached new knowledge and found surprising patterns by studying the data from the ESM. For example, it has become clear that there is a connection between different types of social situations and the cognitive values. If the participants experience the noise level to be high and the communication to be poor, the values of energy, mood, and SOC are affected in a negative direction. On the other hand, socialising in situations where there is less noise while communication is experienced as good has a positive effect on those values. Breaks and being with many people at work seems to cause negative values and loss of energy in several of the participants, while being in a small group of people with whom they can relax seems to provide energy. A question is how to transfer this knowledge to praxis situations at workplaces with hearing-impaired employees? It is often a matter of structure and habits, and it may be less challenging than one might think to change the situation. It takes an individual focus in each case, and

small changes may have great effect. But often the real challenge is to break the traditional patterns of behaviour as change involves not only the hearing-impaired employee, but several other people as well who first have to become aware that there is a problem and then have to be convinced that it is worth dealing with.

We have indicated in this analysis that it seems possible to build up strength to cope with challenging listening conditions by being engaged in activities and spending time with people who support the build-up of positive values—especially energy. In addition, being engaged in meaningful activities seems also to have a positive effect on the values, which also supports the finding from the dialogues. Finally, an afternoon nap can have the effect of restoring the energy level and create strength to maintain positive cognitive values and thus resist stressors for the rest of the day.

The presence of other persons seems to have a positive effect on the participants as the energy level generally rises when the participants are together with one or more people, except in those situations where the noise level is very high and the communication is experienced as poor. At the same time, the energy level seems to drop immediately after socialising and gradually restores itself again.

What the system is not able to log is difference between external and internal experiences of noise and poor communication, as for example when one of the participants logs a high level of noise and experiences of poor communication when he can hear his own tinnitus.

Some of the participants seem to be generally affected negatively on all cognitive values when they are met by challenging stressors and some seem to be able to keep the values separated and only let stressors affect a small part of the cognitive experience—as, for example, meaningfulness—and thus stay positive on other cognitive values. This may be important to look into in future studies as this may indicate differences in people's abilities to resist stressors in everyday life and thus help predict who is likely to develop stress.

# CHAPTER 11. GENERAL DISCUSSION

The general discussion relates to all three parts of the research question:

*RQ1: How can I obtain a holistic perspective of the contexts that influence the labour market attachment in both a positive and negative direction among employees with a hearing loss?*

*RQ2: Also, what are the everyday stressors that potentially increase sickness absence and the risk of developing a fragile labour market attachment among the group— and what determines the individuals' ability to resist these stressors?*

*RQ3: And finally, in extension of this, how is it possible to involve the organisation and not just the individual in a communicative process of reducing stress and increasing labour market attachment among persons with hearing loss?*

## 11.1. STRESS, HEARING LOSS AND 'GETTING AROUND IT'...

The way a person perceives oneself and one's hearing loss may be determinant in order to resist stressors: The ability to externalise the challenges and problems related to a hearing loss and dealing with them in a pragmatic and reflective way seems of great importance. This must be understood in opposition to being absorbed in the situation without being able to reflect on it, which could also be related to feeling unable to separate oneself from the hearing loss. Being absorbed in the situation seems to cause an ad hoc approach to the daily challenges as they arise, which causes a greater loss of energy than a more strategic and structured approach would.

Maturana and Varela describe living systems as homeostatic machines that are constantly being met with perturbations from the outside world. In order to adapt to these perturbations some kind of compensation takes place within the living system (Maturana & Varela, 1980). This could be the oxygen level in the blood increasing as a person is hiking in the mountains: The system seeks to adapt to the surroundings and the perturbation is in this case the air containing less oxygen than what the system is used to. But what happens as the system is unable to compensate in order to cope with the perturbations? What if a summer flower is exposed to extremely cold weather? It will be unable to compensate and eventually dies. Perturbations can in the context of this thesis be perceived as stressors. If the stressors become too intense and the system is unable to compensate, the system

ends up breaking down. This could be a person experiencing longterm stress and depression as a result of not having been able to deal with the stressors related to the hearing loss due to the person being absorbed in the situation unable to reflect on it and thus unable to act to change it.

### **11.1.1. AM I MY HEARING LOSS?**

Describing the challenges related to hearing loss based on a system's theoretical perspective might help us explain the increased vulnerability concerning stress and stress-related sick leave among persons with hearing loss. Traditionally, the concept of autopoiesis, which was later adopted by Luhmann, explains the human system as a unity of interactions (Maturana & Varela, 1980). We could say that the organisation of the system is what makes it human while the structure of the system can be understood as the different ways we as humans look, behave, think feel, etc. Maturana and Varela coined the term 'autopoiesis' in the 1970's and made a distinction between organisation and structure, which basically means that the organisation of a system makes the system a specific kind of system—for example a human being. We have certain features that make us human beings as opposed to dogs or trees. And this organisation is, according to Maturana and Varela, important in order for a system to stay that kind of system (Maturana & Varela, 1980) and thus for us to call ourselves human beings. But what happens when an organisational feature changes or disappears as with the loss of the hearing sense? Are we then not human beings anymore? And, if not, what are we then? A disability? I am aware that this is pushing the discussion to the extreme. But how does this change in our system's organisation affect our system's structure: Do we change our way of being in the world—our way of behaving, thinking, feeling, etc.? I do not have the answer to this, but the discussion is important as it has to do with the different perspectives, which are often discussed in relation to hearing loss and disability in general: *Am I my disability/hearing loss or do I have a disability/hearing loss?* The two perspectives will most likely have very different effects on the individual's self-perception and the ability to externalise and handle challenging situations.

### **11.1.2. IF YOU CANNOT FIX IT, GET AROUND IT!**

A hearing loss cannot be fixed. But one can learn to live with it. Svend Brinkmann writes in his recent book, "Stå Fast":

When we manage something, it means that we master it well and are able to remove or disconnect it completely. But there are many things that are not just readily removed. Man is vulnerable and fragile, gets sick, and eventually dies. We cannot manage that. But we can get around it, and therein lies that what is difficult remains, but that we learn to live with it.

[Author's translation] (Brinkmann, 2014, p. 68)

Brinkmann's book is a counter-reaction to the societal tendency towards an increased use of self-help strategies among individuals who want to induce changes in life, and among leaders who introduce and practice self-management and methods based on positive psychology among their employees. He mentions at one point the importance of not following one's gut feeling and ceasing to listen to one self as this may lead to depression once one realises the character of the reality one finds one self in. Instead, he encourages the reader to do something that is the opposite of what the gut feeling tells him to do. When doing the opposite of what you feel like doing, you prepare and strengthen yourself to better be able to meet adversity later on in life (Brinkmann, 2014).

A major part of this thesis is exactly about increasing focus on the self. But the point here is that it is necessary to gain awareness in order to be able to make the difficult choices that can strengthen the individual—choices that are based on the increased awareness rather than on a gut feeling. On several occasions throughout this thesis we have witnessed that the participants have lived their lives based on what 'felt right.' An example is the woman who found herself being socially isolated without her noticing that this development towards more and more isolation had been in progress for several years. As she became aware of the situation, she decided to go against the instinct, which had made her withdraw from social life. Her escape from social activities had left her in a job and housing situation where she only rarely had to deal with other people—fairly isolated. After participating in the test, she considered moving to another house in an area with more social activities. Making a decision like that is far from comparable to taking the easy way out or following one's gut feeling. It will have both expensive and time-consuming consequences. Many people with a hearing loss instinctively navigate to avoid socialising too much, but is that really what is the best for them just because it is what feels right to them at that moment and because socialising leaves the person feeling exhausted? What we have learned is that the energy level may decrease after socialising but this thesis also found that the energy level



generally seemed to *increase during* the act of socialising and only *decreased after* socialising.

## 11.2. ORGANISATIONAL RESPONSIBILITY

In general, the test-participants of the present study seemed to be very much alone in the process of dealing with their challenges related to work and hearing. And often the thoughts that were revealed throughout the dialogues had not been expressed to anyone else during the week of testing. Becoming aware of the narratives of one's life and reflecting on the different contexts seem to 'unlock' the narrative enabling the person to act and create the potential for change. Using the word unlock in this situation indicates that as long as one is not aware of the reality of a situation one is trapped in it, which is the same as being absorbed in the situation.

### 11.2.1. THE SHARED POTENTIAL

A well-functioning team with a balanced reciprocity supports a positive narrative of the self just like a high level of reflection creates a high degree of awareness towards contexts in life that might cause stress (Kappelgaard & Lund, 2013). Becoming aware enables change as well as the potential for changing the personal narratives by providing the person with an ability to act and thus to gain more control over different life contexts. Gaining awareness makes it possible to address challenges at an organisational level, perceiving them as potentials for increasing team performance rather than problems that need to be solved. We could call this the *shared potential* as increasing the hearing-impaired person's ability to hear and communicate increases the potential success of the entire team as well. By strengthening communication, positive narratives of the self and the team become possible through what earlier was perceived as a negative narrative, as difficult communication is transformed into effective communication. In order to be able to do this, increased awareness of the contexts that cause both positive and negative narratives is necessary.

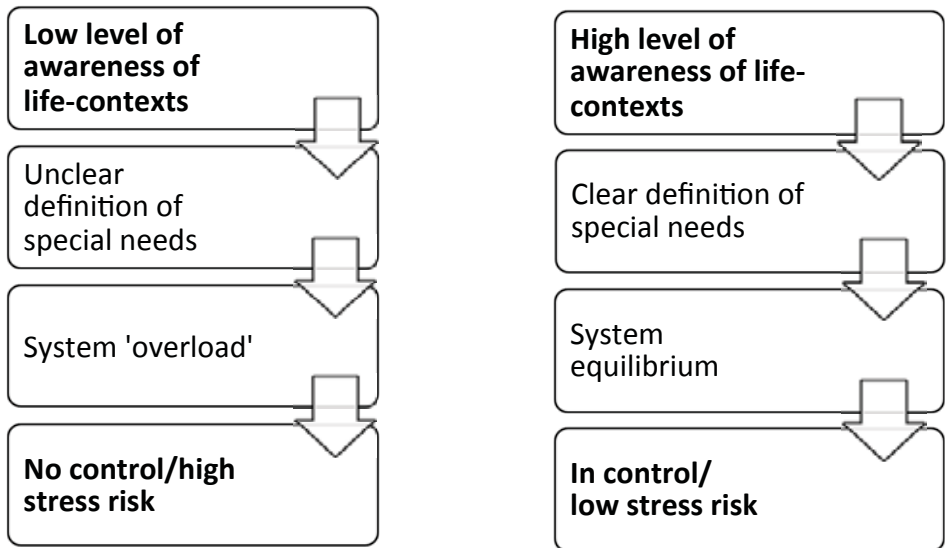
If the special needs related to the hearing loss are perceived as a shared potential to the team it will support the construction of a strong self-image among the individual group members as well as the positive narrative about the team as a whole. Special needs related to the hearing loss can thus be met in a way that does not compromise the narrative of the person being an asset to the company. However, management

decisions play an important role in the development of the positive narrative through the strategy chosen in order to include hearing-impaired employees.

### **11.3. WHEN AWARENESS PAVES THE WAY FOR CONTROL IN LIFE**

In order to become able to change anything, one must be aware of what the challenges are. A low level of awareness of and reflection on different life contexts may leave the person absorbed in the situation with no option to change the narrative as a certain level of awareness is needed to make conscious choices that can change the situation in a positive direction (Kappelgaard & Lund, 2013).

An unclear definition of what the special needs are may lead to the compromising of these, as the person may not be aware that there is a problem that needs to be dealt with. This may eventually lead to stress as the human system becomes ‘overloaded’ because it eventually becomes too challenging to respond to the demands from the outside world—the perturbations which the homeostatic system cannot compensate for. The process of gaining awareness and control can be illustrated through the motion from increased reflection on everyday contexts to increased awareness. Elevated awareness is necessary in order to be able to make conscious choices. Making conscious choices is a way of putting the elevated awareness into action, and every kind of action has a potential to create change. When change happens from a situation, which is unwanted, towards a wanted situation, the person will feel in control. This process of enablement and of gaining control is illustrated below in Figure 2.



*Figure 11-1: The importance of awareness to stress and feelings of being in control*

The issue of control became dominant through the coding process as one of the four meta-categories. One of the focal areas was control related to hearing loss and tinnitus. We learned that when a person had the option to act and create change from an unwanted towards a wanted situation, it would empower the person. However, when there was no option to act to change the situation, feelings of frustration and anger were revealed. The main point here is that even if there was an option to act it still caused negative feelings if the situation was only changed from one unwanted situation to another. Therefore, the change that is created has to move towards a more wanted situation in order to give the person a sense of increased control. At the same time, change that created a different but also an unwanted situation still seemed to be preferred to making no change at all.

## 11.4. LOOSING AND GAINING CONTROL

Several of the participants in the study show signs of negative thought patterns and expectation anxiety when it comes to certain activities such as attending meetings or courses at work. Some of these negative thought patterns are related to work

environment, but some also seem to be based on experiences of loss of control. These negative patterns might eventually cause withdrawal from certain activities—i.e. when considering staying at home from a course because experience tells the participant that she will feel ‘lost’ when she misses information. This action is equivalent to avoiding the social scene, which Hallberg and Carlsson mention as one of the two main actions of hearing impaired people when navigating in social settings: avoiding and dominating the social scene (Hallberg & Carlsson, 1991).

Another way of responding to negative experiences, which is far more difficult for the person to do alone, is to gain more control in listening situations. This means going through the process of enablement as illustrated above in Figure 2. In order to gain more control over the situation it is necessary to first start noticing what is causing negative thoughts and feelings, fatigue, wanting to withdraw, etc.: Is it missing information? Is it the teacher or lecturer mumbling? Is it discussions or problem-solving in groups? Noticing, defining, and reflecting on the problem will increase the ability to change the situation through articulation of the problem and through active involvement of the people concerned in order to find a solution and act on it.

If the action leads to a positive outcome the feeling of gaining more control over the situation is likely to materialise and move the person towards a stronger self-image, which may possibly rub off on the image that colleagues and management have of the person. For example, if the problem is the teacher mumbling and information is lost, several actions could improve the situation. Often, a combination of actions is preferred to induce wanted change. Besides improving the listening situation, the information can be made visual by hiring a writing interpreter.

Wanted change is viewed from the perspective of the hearing-impaired employee. A teacher or lecturer might, for example, oppose carrying an FM-system around the neck while teaching and claim that: “I speak loud enough—there’ll be no problem hearing what I say.” In this case, the company management should explain the necessity of it to the teacher and then make sure the device is used. The outcome for the employee can be invaluable. However, often what happens in situations like these is that the employee gives up and accepts the teacher’s decision without further discussion. The example is not a fictive one but similar to what I have heard several hearing-impaired persons narrate.

#### **11.4.1. CONTROL, STRATEGIES AND ENERGY MANAGEMENT**

When a person cannot hear what is being communicated, he or she to some degree loses the ability to comprehend and subsequently loses control over the situation. Hearing-related control understood as strategies can be used to manage the

communication situation and the energy level. Strategies are considered structured ways of staying in control and avoiding the unwanted situations. Some strategies can be put in the category of avoiding the social scene and some fit in the category of controlling the social scene (Hallberg & Carlsson, 1991). Hallberg and Carlsson consider the strategies of avoiding the social scene as mainly negative and the strategies of controlling the social scene as mainly positive. I would like to rephrase this and instead claim that the strategies and choices that are based on aware reflections are positive. Strategies based on gut feelings can be both positive and negative. The negative part of basing strategies on gut feelings alone is that the potential gain from doing something, which immediately goes against what feels right, are overlooked—as, for example, the energy level rising during social interaction or the colleagues reacting positively as the hearing-impaired colleague comes clean with needs and challenges related to a hearing loss. Thus, the choice to eat lunch alone occasionally instead of always joining the colleagues in the canteen may be a good—even necessary—strategy. At the same time, choosing to join the colleagues for a drink after work occasionally might be a good strategy even though it goes against what the person feels like doing at that moment.

The main issue is to level out the avoiding and the controlling strategies in order to reach a balance that supports a fairly steady energy level as well as a ‘reasonable’ social level. In order to find out what is balanced and reasonable one has to consider life contexts all together—like the woman who during the test week realised she was isolating herself and considered making different choices in life to become more social. A satisfying social level varies from person to person and is possible to describe only at an individual level. By looking at the different choices and strategies throughout a day, a week, a month, etc. may help consider where to adjust. Structuring the day by going through every little thing that might give or take energy is also a way of staying in control. Making small changes such as, for example, arriving at work an hour earlier than usual might be what makes the day manageable.

Strategies are, as we have learned, tools that can be activated to stay in control—control related to hearing; *not* control related to power, which is a completely different discussion. And every tool that can be activated in order to stay in control is important. Communication strategies such as looking at somebody’s face and lips while talking can help the person to decode more of what is being said.

Strong negative feelings such as frustration, anxiety, and anger are expressed in connection with loss of control. In several cases, the lack of control first leads to strong negative feelings and subsequently to an attitude of giving up and feeling defeated. It does not take many negative experiences of losing control to construct negative thought patterns. The negative thought patterns might be expressed through anticipation anxiety and unwillingness to participate in different activities both professionally and socially, which over time may result in a more fragile

labour market attachment and social isolation. While, on the other hand, being able to stay in control helps the person stay balanced in the sense of maintaining a balanced energy level as well as maintaining balance in meeting the demands from the outside world.

#### 11.4.2. SANCTUARIES AND TRANSPARENCY

Maintaining control in the presence of others is a recurring issue as, for example, the need to take off the hearing aids after work implicitly indicates no communication. This can be difficult in the presence of other people. The need to relax alone is mentioned by several of the participants in the dialogue sessions, and several address the importance of not having this routine broken.

In general, small strategic routines seem to be of great importance to the participants. A routine has to do with predictability, which is lost when the routine is broken. In addition, predictability has to do with being in control of what is going on. When the routine is broken, it causes a degree of loss of control. A routine in this sense does not mean routine work—it means an activity during a workday that contains elements of predictability including aspects of duration, type of activity and number of people in the room. An example could be the shop assistant who talks to costumers all day long, which she loves, but, at some stage during the day, she sweeps the floor in the back room because she needs a break in communication. Alternatively, it could be the janitor who needs a five-minute break sitting alone and taking off his hearing aids every day after having lunch with his colleagues in the noisy canteen.

The need to relax by oneself and the need for strategic routines evoke the idea of a sanctuary. In the original understanding, a sanctuary is a sacred place and, in a more modern sense, it means a safe haven. Defining the strategic routines due to hearing loss needs as sanctuaries makes sense as the word *routine* may be mistaken for *routine work*. In addition, it makes sense because of the importance a strategic routine has to the person and the respect that it demands from the outside world. It is a place where one can be alone while not having to deal with anything or anyone. These sanctuaries are necessary in order for the hearing-impaired person to manage daily life, and they must be respected by others and by the hearing-impaired persons themselves as a safe haven where energy is rebuilt. The ability to recognise and respect one's own needs may not lie implicitly within every one of us—some people will need help to realise the importance of it and to stick with it in work situations.

Finally, aspects of meaningfulness, happiness, love, and positive associations can affect the energy level in a positive direction as the analysis indicated a connection

between gaining energy and being involved in a meaningful activity, feeling love for family members and the associations connected with certain activities such as drinking coffee, shopping, etc. It is possible to let these aspects guide the structuring of strategies and sanctuaries. It seems possible to have a strategic routine broken and still maintain a balanced and positive energy level if the disturbance is related to one of the above aspects. For example, a good colleague interrupting a ‘sanctuary’ when he or she considers it is the right thing to do.

The salient point of the ability to maintain sanctuaries and other strategies as a result of controlled actions is what has earlier in the analysis been referred to as hearing-loss transparency. Hearing-loss transparency means that as the needs and the contexts related to managing the hearing loss become a part of the hearing-impaired employee’s conscious awareness, it is important to include colleagues and management in matters that are relevant for them to know. Otherwise, hearing loss management becomes a one-man struggle.

### **11.5. STRENGTHENING THE LABOUR MARKET ATTACHMENT**

The following model (Figure 11-2) is an attempt to integrate the above discussion of important details when examining potential stressors and subsequently the strengthening of the labour market attachment in individuals with a hearing disability. To sum it up, the aim is not only to avoid stress, but also to articulate reflections on contexts and take action in matters that may lead to stress and a fragile labour market attachment in order to create the preconditions for strong individual narratives and effective work teams. We have discussed that:

- The shared potential of the team may increase team performance as the management takes action by making effective communication a shared goal rather than handling special needs related to a hearing loss at an individual level only.
- A strong narrative of the self develops from balanced reciprocal altruism and from being an included part of an effective team.
- A high level of awareness, as well as making conscious choices and changes towards a more wanted situation, increases the feeling of being in control in hearing-related matters.
- Hearing loss control increases the ability to manage the energy level through activities, strategies, and ‘sanctuaries.’
- Hearing loss transparency is important in order to share the responsibility of hearing loss management.

- Energy management improves the potential for effective communication within the team and the organisation.
- A high level of hearing loss control and organisational focus on ‘the shared potential’ strengthens labour market attachment.

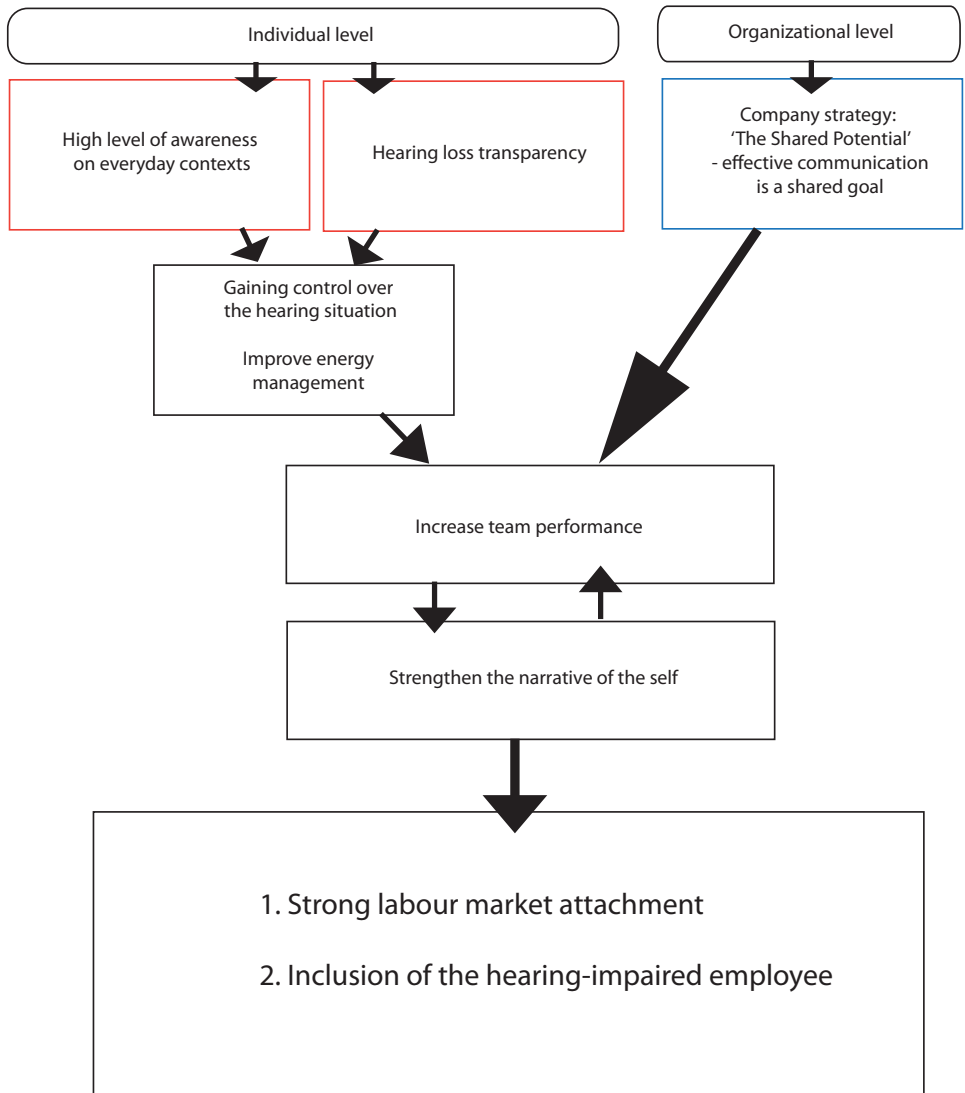


Figure 11-2: Strategy for increased labour market attachment and inclusion



The different parts of the model form a multidimensional strategy for individual and organisational action that matches the salutogenetic idea described by Antonovsky (Antonovsky, 2000). The focus is not on what causes stress but on what causes the opposite, namely a strong self-narrative, inclusion, and strong labour market attachment. The positive spiral is initiated by the decision to have effective communication as a shared goal in the work team or in the entire organisation. Increased individual awareness and hearing loss transparency leads to controlled actions through open dialogue. The success of the effort to manage not only hearing loss but also communication at a more general level depends on the ability to have this dialogue as well as the ability to reflect consciously on everyday work-life contexts. First then, the hearing-impaired employee will be able to navigate through the day with a balanced energy level. In addition, communicational turn-taking as well as social sensitivity among the group members will help them become an effective and strong work team. When an individual is an included part of a well-functioning team the positive narrative of the self is given fuel and the labour market attachment is strengthened, thereby creating the preconditions for further development of the positive spiral, which in time will affect the individual and group experience of quality of life and work-life.

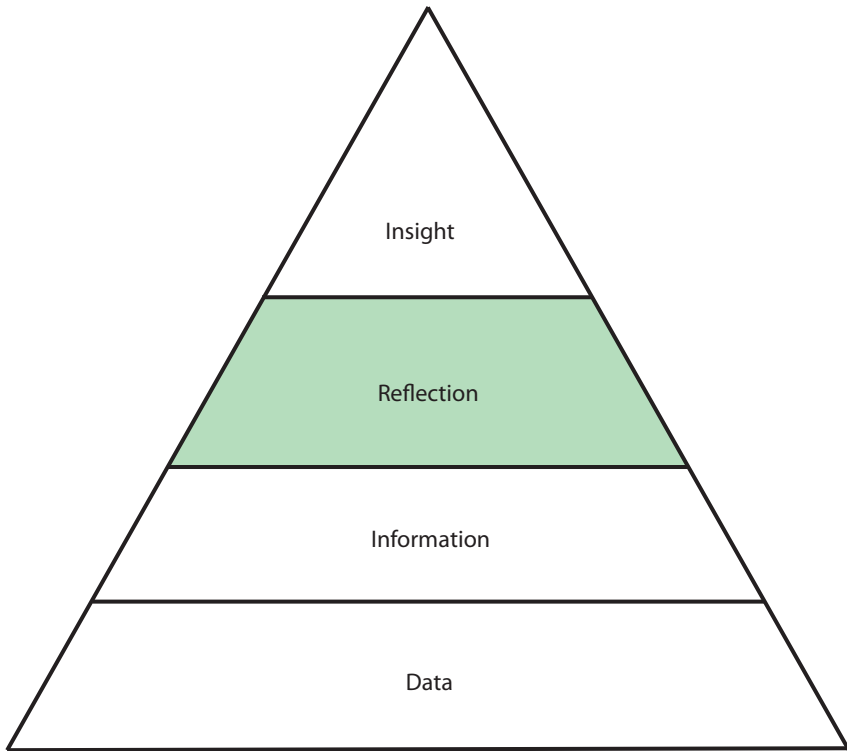
## **11.6. E-HEALTH AND ECOLOGICAL MOMENTARY STORYTELLING**

The method, Ecological Momentary Storytelling, is to be considered a part of the eHealth mega-trend, which has been evolving fast over the past years. What makes Ecological Momentary Storytelling unique in this context is that it is based in the humanistic research field while borrowing quantitative data-logging methods from the natural sciences and mixing these with methods based in the human science field. Ecological Momentary Storytelling is thus both method and data triangulation, and the main purpose of the method is not to reach generally applicable findings based on a larger data-set, which to some extent can be perceived as ‘big data,’ but to analyse the large amount of data by focusing on deviations and keeping a phenomenological and qualitative perspective. I will return to discussing the potential of a more statistical and quantitative approach in chapter 12, “Future Perspectives.”

### 11.6.1. DATA OWNERSHIP AND PRIVACY

The discussion on data ownership and privacy is becoming increasingly relevant as big data becomes a more and more present part of our lives. Large companies and government institutions get access to more and more data every day, and these data are used primarily for discovering large-scale tendencies among the population. We are yet to understand the consequences and may never reach a full understanding of the possibilities and the threats of big data.

When considering the impact and potential of Ecological Momentary Storytelling, I am mainly concerned with the level of data sharing within the organisation. In my opinion, the individual employee should own the data fully. That employee should decide what the data should be used for. There are different options including deleting all data once the test and the final dialogue has been completed. The data has, at that stage, already been collected, looked at, analysed, and reflected on and during that process of reflection, increased awareness of everyday contexts has been reached by the employee and thus a process of knowledge integration and insight has already happened as illustrated in Figure 11-3 below. Another option could be to connect the data—both the ESM (Experience Sampling Method) and the HRV data—to an online community where the data is analysed automatically and feedback to the employee is given. The employee can then decide which information he or she wants to share with, for example, a physician or psychologist who is connected to the company in situations where employees experience stress. In some situations, data and/or feedback could also be shared within a work team and/or with the company management as long as there are rules that ensure no misuse of the information. There are some questions to be answered if this method is to be further developed and applied in natural organisational settings: How do we make sure that the data does not end up in the wrong hands? How do we make sure that the data is not used for the wrong purposes/against the employee? And how do we make sure that the individual becomes aware of the potential consequences of sharing data?



*Figure 11-3: From data to insight*

An issue in this discussion is the importance of considering reflection among the employees as a part of the process towards reaching insight. A general problem is that professionals working with eHealth often leave out this level when generating and implementing ideas within the field. I made this mistake myself in the beginning of the study. I thought that when I did the first tests after the user tests, the best approach was to look at the data as a researcher before introducing it to the participants, analyse it, and provide feedback to the participants. However, the result was that the participants did not reach the insight themselves as the researcher and not the participants themselves made the analysis. I argue that participant data ownership and engagement of the participant as a fellow expert in analysing the data and who reaches insights based on reflections on this is much a more effective approach in order to change behaviours.

### 11.6.2. NOT ALL PEOPLE ARE IT-TECHNICIANS...

Reality is that most people are not IT-technicians. By this I intend to draw attention to the usability challenges and the challenges with the technology in general, which the reader was introduced to in Chapter 7 in the evaluation of the method. Especially, one of the participants was challenged with technical issues and fortunately she was not scared of technology and her husband was an IT-technician. Despite this, we had to break off the test and have the system developers work on the system before she could complete the test week. Two persons did not complete the week due to technical challenges and technique ‘overload.’ These challenges also need to be attended to before introducing the method on the market. One could imagine that the HRV measurements could be a part of the hearing-aid technology for example, so that there would be no extra equipment to carry. Furthermore, the ESM should be downloadable to the person’s own smartphone. If the technology is not made less challenging and easier to carry around, the idea of helping people with stress is contradictive and the method will then potentially increase the stress level instead of decreasing it.

### 11.6.3. MERGING RESEARCH FIELDS

The HumanSensing field allows us as researchers within the human sciences to introduce methods of collecting data, which originally derive from the natural sciences. The methods incorporated in Ecological Momentary Storytelling are mixed and one could say that the HRV logging derives from the natural sciences, the ESM data logging derives from a combination of the two scientific realms and the dialogue as a method for data collection derives from the human sciences field. So why is data-triangulation important when doing this kind of research? It is important to state that the quantitative methods of measuring HRV and the quantitative data logging—the ESM—are used in a phenomenological and qualitative manner in order to allow the participant to reflect on the data himself and thus avoiding the non-engagement described above. This is a very important reason that has been emphasised throughout the thesis. If we had left out the dialogue as a part of the method, the reflection on everyday contexts based on the participant’s ability to read the data alone and not have someone to reflect with, would have been inadequate as we experienced it in the pilot study in 2011. Therefore, the dialogue is a crucial part of the method in order to integrate knowledge and gain insights and awareness on these contexts. By looking at the large amount of data—more than 2000 hours of data logging—in a phenomenological and qualitative manner, the outcome will highly benefit the participant and induce change as opposed to having the data analysed by somebody else—in this case the researcher. And at the same time the researcher will get not

only quantitative data, which can be analysed in a quantitative manner finding generalised tendencies among the participants, but the method also allows for a much more qualitative approach, which tells us more about the natural settings and the contexts each individual finds himself in. Without the dialogue, this would have been impossible, as we would then have had ‘only’ the numbers.

Finally, the dialogue serves to increase reflections through the use of data as the here-an-now-experiences, the fatigue, the different feelings, and moods are no longer merely something that is going on inside the individual, who may find it difficult to talk about such issues, but it is now externalised and much more tangible and analysable. And this proves to the individual that the feelings and thoughts that he has had, and maybe has been keeping to himself, are actually real as they are now visual, tangible and ‘out there,’ as opposed to just ‘in here’ in the mind and/or in the body of the individual.

# CHAPTER 12. FUTURE PERSPECTIVES

In continuation of the above discussion let us look at the perspectives of data-logging, the perspectives of having a more quantitative approach to analysing data, the perspectives of applying the method to more people, and the perspectives of applying the method to other target groups and in other societal areas.

## 12.1. DATA-LOGGING

Self-monitoring and self-logging are activities that become increasingly acceptable and more and more people do it as the logging activity becomes easier and they can see a purpose in doing it. Especially within the sports arena, data logging has become accepted as a way of tracking your own progress. Sharing data also is becoming more and more common, for example, when you upload your running track on Endomondo<sup>30</sup> for others to try out or when you post data from your latest running performance on Facebook. It also may be motivating to compete against others in sports challenges set up by the App providers. The whole idea is to motivate but also to add to the construction of the strong, active, social, and courageous digital self, which can make the ‘analogue’ self feel better.

With the introduction of smart watches data logging has become even easier and the data analysis and user feedback even more useful to the individual. In addition, the companies that introduce the products can use the data in more or less ethically accepted manners. An example is the recent Volkswagen scandal in which a chip was built into about 11 million diesel cars with software that could sense emission test scenarios and cause the engines to emit fewer pollutants during the test than during normal driving (<http://www.bbc.com/news/business-34324772>).

There are some very interesting perspectives on being able to log biosensor data as a part of an already existing technology such as hearing aids, which are already attached to the skin. The thought of logging EEG (Electroencephalography) using sensors integrated in the hearing aids to register the cognitive load of the user

---

<sup>30</sup> Endomondo is a social fitness network created by Endomondo LLC which allows users to track their fitness and health statistics with a mobile application and website. Endomondo launched in 2007 with the goal of motivating people to lead healthier lives (<https://en.wikipedia.org/wiki/Endomondo>).

and/or to steer the microphone direction through thought control, integrate HRV sensors to register stress and even inserting a gyroscope to indicate the activity the person is engaged in is both intriguing and worrying. Standardisations for the ethical use of the data and knowledge that the company may get access to are highly needed.

## **12.2. AT A LARGER SCALE...**

Applying Ecological Momentary Storytelling on a larger group of hearing-impaired employees and adding a control group would give the researcher an opportunity to analyse the data more statistically and in a more representative manner. This way, more generalised rather than individualised conclusions can be made and different work areas can be looked at in order to evaluate differences in how persons with hearing loss cope in different work functions in order to identify ideal and non-ideal work areas. Furthermore, strategies adopted by the individual as well as the company can be analysed in order to find out how the employee, the team, and the company are affected by the different strategies applied.

In this study I did not analyse the HRV data quantitatively and compare it to the log data. The HRV data were used for looking at deviations and specific moments pinned out by the participants, which was the intention of the present study, and the data analysis was mainly focused on the data obtained throughout the dialogues as a part of the Grounded Theory approach. It would be interesting to compare the HRV data with the ESM data in a future study in order to find patterns that can tell us more about how the body actually reacts in specific situations. This could most likely provide us with some answers concerning the relationship between hearing loss, stress, and physical/somatic illness. One thing that we have to consider though is the effect it may have on the individual to focus on the physical consequences of stress: Is the individual able to cope with knowledge on how the heart, for example, reacts to stressful situations? Can we risk an unhealthy focus and causing anxiety by drawing the employee's attention to the possible overload of the body and mind? I argue in this thesis that gaining awareness is necessary in order to be able to act to change the situation. However, what if the situation is unchangeable? Will we then have caused an awareness that creates anxiety instead? This question has to also be taken into account if the method is to be applied at a broader scale.

### 12.3. AN EXTENDED SCOPE?

We have already touched upon biosensors integrated in hearing aids. One could imagine how applying Ecological Momentary Storytelling in the hearing-rehabilitation area could support the professional's adaption of knowledge on how different communication strategies support the patient's<sup>31</sup> process of rehabilitation by creating a peak into everyday contexts that may affect the adoption of hearing technologies. In addition, the ability to understand the patient's auditory situation becomes easier as one could imagine including a technology that allows the professional to 'listen along' in certain situations. Again, we face ethical issues and, again, I argue that the patient should be the one in control over which situations the 'listen-along' function should or should not monitor. Finally, the patient's ability to share with the professional the natural and ecological settings in which he navigates on a daily basis will most likely foster increased patient interest in participating in his or her process of rehabilitation, thereby likely accelerating that process.

Ecological Momentary storytelling could be applied in other areas as well. It is basically a question of tailoring the design of the ESM to the specific situation for which it should be used. During the development of the system, we constantly have been thinking of the system as more adaptive and tailored to meet different target groups. This is already done to some extent as we have two different designs for the two target groups that Lisbeth Kapplegaard and I have studied: School teachers and hearing-impaired employees. The content could thus be further tailored to fit different target groups and different goals. One could also imagine the method applied within the psychiatric field as a tool for the therapist to gain knowledge of how medicine effects the patient, how new therapeutic approaches work, etc.

---

<sup>31</sup> I use in this context the word 'patient' to emphasize that we are talking about the hearing-rehabilitation area in which this word seems to be generally preferred.



## CHAPTER 13. CONCLUSION

The present study was aimed at clarifying matters that can create preconditions for strong labour market attachments and successful inclusion of hearing-impaired employees in organisational contexts. The focus has been on the reduction of stress, which has turned out to be a multidimensional process with many perspectives to take into consideration. The salutogenetic question and the concept of SOC (sense of coherence) have supported both the methodological considerations for investigating the field through the construction of the method, as well as the construction of tools and models for operationalizing new theories. New knowledge was reached through a Grounded Theory analysis and theories on SOC and on effective work teams have been included in order to produce new theory.

Throughout the present thesis I have thus sought to answer the following research questions:

*RQ1: How can I obtain a holistic perspective of the contexts that influence labour market attachment in both a positive and negative direction regarding employees with hearing loss?*

*RQ2: Also what are the everyday stressors that potentially increase sickness absence and the risk of developing a fragile labour market attachment among the group – and what determines the individuals' ability to resist these stressors?*

*RQ3: And finally, in addition to this, how is it possible to involve the organization and not just the individual in a communicative process of reducing stress and increasing labour market attachment among persons with hearing loss?*

### 13.1.1. RQ1 – HOW TO GAIN INSIGHT?

The incentive to develop the method (Ecological Momentary Storytelling) is the increasing problem of work-related stress and the fact that more hearing-impaired employees fall sick with stress than normal hearing employees. The word 'stress' in itself does not seem to cover the experiences and the narratives related to stress. This has become clear throughout the study. Instead, stressful experiences are expressed through negative feelings, expectancy anxiety, and thought patterns that may, over time, evolve into severe long-term stress. The concept of stress needs to be expanded to include the degree of self-awareness, the nature of the self-narratives, the nature of the organisational strategy to include hearing-impaired employees and the level of sense of coherence in the individual—including the

three components that also involve the support of and relationship with family, friends, and colleagues. The sum of the above will affect the individual in either a positive or a negative way, which may eventually lead to inclusion and coping or stress and sick leave. The concept of stress among hearing-impaired employees is thus closely connected to the concept of stigmatisation.

This multidimensional and biopsychosocial understanding of stress led to the development of Ecological Momentary Storytelling as a data triangulation method. This method can embrace this understanding by measuring cognitive, social, psychological, and physiological reactions to stressors through the application of the ESM (experience sampling method) and the HRV (heart rate variability measurements) and combining it with a follow-up dialogue for reflection and gaining awareness. This method enabled us to identify the nuances and the context-patterns that lead to an understanding of stress among hearing-impaired employees.

When applying such a method in an organisational context, it is of course relevant to reflect on what challenges the organisational context offers. We know very little about the challenges of self-monitoring in the workplace. The amount of literature is limited and the literature that exists focuses mainly on the technical possibilities and less on the impact of the context on the technological opportunities, limitations, and ethical implications. Although the method has brought us closer to an understanding of work-related stress among hearing-impaired employees, the study also has caused us to reflect on some potential risks. It is crucial to consider ethical issues pertaining to the data. An organisational context is an arena with many interests and relations, and power is at stake between employees and managers. The method should be used with great care and include reflections on data ownership, purpose of the monitoring, data access, and data storage/non-storage. In addition, the method could contribute to the individualisation of the stress problem rather than addressing the problem at an organisational level. Moreover, as the answer to the salutogenetic idea—and thus to the stress problem generally speaking—is the sense of coherence. The individual might be held responsible if the sense of coherence is low. However, the fact that the sense of coherence is an individual matter does not mean that it is the individual's responsibility alone to maintain it. The sense of coherence depends also on the relationship with colleagues, family, company management, and friends. Network and relationships are important to the level of sense of coherence and thus it depends on more than just the individual. It is a common responsibility as it occurs in a dialectic relationship between the individual and his surroundings.

Technical challenges with the system caused nervousness, irritation, and even stress in some of the participants, which may have affected some of the answers in the experience sampling method. At the same time, the findings show that in most cases it was possible to integrate the system into the rhythm of everyday life as long as the system did not crash and cause stress at a continuous level.

In general, the method seemed to interest the participants who were motivated by the thought of gaining insight into their own physical and mental reactions to everyday situations. We have learned that the method creates this space for gaining awareness and insights through the reflection on and externalisation of everyday contexts and related challenges. The participants reached a meta-perspective on the degree to which their daily activities affect them both mentally and physically. Each part of the triangulated data acquisition is essential to the method in order for the participants to reach a better understanding of their own work-life stories and in order for the researcher to achieve an accurate understanding of the data. An approach in which the data were analysed and feedback was given at the beginning of the dialogue was tested and it turned out not to create more reflection, which was first assumed, but rather create a distance between the participant and his data. Analysing the data together with the participant and including the participant as an expert in interpreting the data proved to create an elevated level of reflection, insight, and gained awareness.

### **13.1.2. RQ2 – WHAT ARE THE STRESSORS AND HOW ARE THEY DEALT WITH?**

Based on a GT (Grounded Theory) analysis of the six dialogues, a number of key points, questions, recommendations, and models have been reached, described, and constructed. The models are thought of as both theory explaining the situation of these six hearing-impaired employees and as practical tools for professionals to use—just like the key points, recommendations and questions that can be taken into consideration and included in a stress-reduction program by professionals dealing with stress in the organization. The creation of the dialogue tool and the recommendations in Article 4, Chapter 9, are an attempt to operationalize a mind-set among professionals dealing with stress among hearing-impaired employees in order to support the professionals in a process of stress prevention and reduction. That mind-set is based on a thorough understanding of potential stressors in everyday situations and how hearing-impaired persons may experience them.

The dialogue tool is thus expected to contribute to a process in which the stressed employee with hearing loss is helped into a positive spiral, in which stress is reduced, the quality of life is improved, and the energy is used at work rather than on the challenges associated with hearing.

The GT analysis indicated that three major themes play a role when reflecting on everyday work-life with a hearing loss, themes that may be determinant in the development of stress among hearing-impaired employees. These themes are ‘role and identity,’ ‘control related to hearing,’ and ‘biopsychosocial contexts.’ These themes have been dissected into smaller parts based on the dialogues, which were

carried out as a part of the method, and a scheme of topics for organizational dialogue was presented suggesting different subjects of focus when dealing with hearing loss and the ability to thrive in an organizational context. The findings showed a clear connection between stress and everyday contexts that may influence the energy level and the experience of being in control. The ability to reflect and gain awareness of these contexts is essential for gaining control related to the hearing and for being able to navigate through the daily activities that cause fatigue and provide energy.

The findings from the GT-analysis (Articles 3 and 4, Chapters 8 and 9) and the analysis of the ESM (experience sampling method) data in Chapter 10 largely support each other. However, at the same time the ESM-data indicated more connections between different contexts than were discovered during the dialogues. The SOC, mood, and energy level seem to be affected negatively when communication is experienced as poor and the level of noise is elevated while the values are affected positively when communication is experienced as good and the noise level is low.

The combination of breaks at work and many people in the room has a negative effect on most of the participants and causes the values of SOC, mood, and—in particular—*energy* to drop. The importance of ‘sanctuaries’ where the cognitive levels can be restored is not to be underestimated. Being in a small group of people with whom it is possible to relax and build up energy seems overall to have the opposite effect on the cognitive levels, and, at the same time, it seems to have a preventive effect on and creates resistance to subsequent challenging listening situations. It thus seems possible to build up strength to cope with challenging listening conditions by being engaged in activities and spending time with people that support the build-up of the positive values of mood, energy, and SOC. The concept of meaningfulness is part of the explanation. That concept is also an essential part of the SOC. If the activity is meaningful and at the same time is not too demanding on the individual (this could be translated into manageability and comprehensibility being the other two components forming the SOC), the activity provides not only more energy and a better mood, but it also supports the further development of SOC. The theory of the SOC being essential to the development of a positive spiral among hearing-impaired employees is thus confirmed through the findings of this thesis. That means that it is true in the case of the six participants and thus may be true on a larger scale. However, the SOC depends on a row of outer conditions and is thus not an individual matter alone because the company strategy is determinant in order for the individual to be included as a valued and effective employee and to maintain a strong labour market attachment.

The presence of other people seems generally to have a positive effect on the participants when the right conditions, as mentioned above, are present. The energy level rises when the participants are together with one or more people and seems to

drop immediately after socializing. The fluctuation of the values is considered more 'healthy' than stable values indicating that the person is alone most of the time. The cognitive levels may be stabilized at a relatively high level, but if it means that the person is alone most of the time, we must consider the nature of increasing isolation, the reasons for it, and how it may sneak in on the person. It may be experienced as an ambush being performed, as isolation becomes a known fact to the individual through gained awareness.

### **13.1.3. RQ3 – HOW TO INVOLVE THE ORGANIZATION?**

Modern work-life of today calls for adaptability, innovative thinking, and the ability to navigate through a constantly changing world, changing organizational structures, changing work-routines, changing work areas, and changing management strategies, which at the moment are focused on positive psychology, coaching, and employee performance reviews. The responsibility for one's own health and for building a strong network lies largely with the individual alone. One can argue that this is the way that it should be, as it is the individual alone who can choose to reflect on his or her own life contexts and thus seek to reach a greater sense of coherence. But in a work context the individual's ability to engage in a work team in a positive way through the construction of a strong self-narrative depends on whether the challenges related to the hearing loss are not only known to the individual but also to the colleagues and the management. This is what is referred to as hearing loss transparency, and it is true that it to some extent is the responsibility of the hearing-impaired employee to create this transparency as peers cannot see or guess what challenges and needs are related to a hearing loss as long as it is not communicated. Also, the company management must take responsibility in spreading knowledge to the colleagues of the hearing-impaired employee on, for example, agreements made concerning these needs. Clear communication and information is needed to reduce the role of the hearing-impaired employee as a solitary ambassador for his own hearing loss.

The organization management thus has a responsibility to support the individual in informing about needs, but it is also responsible for taking action to initiate and activate compensational options related to the hearing loss. The outcome, and thus the increase or reduction of stressors on the individual, depends highly on whether the hearing loss is considered as merely a row of special needs of a single individual or an opportunity to improve communication at an organizational level. An option for the management could be to describe a communication strategy to increase team performance. Company strategies and policies concerning communication are—along with the individual's increased awareness on everyday

contexts—thus crucial to the hearing-impaired employee’s ability to maintain or gain a strong labour market attachment and experience inclusion in the work team and in the organization. However, not only is prioritising effective communication in the team or in the organisation a way of increasing the company’s CSR (corporate social responsibility) profile, it may also increase company profits. This derives from effective communication and included employees paving the way for high performance where team members manage to sense the cognitive and emotional states of group members and thus increase their ability to work together through effectively adapted interactions.

# LITERATURE LIST

Aalborg Universitet (n.d.). *HumanSensing - projekt*. Lokaliseret den 16.04.2015 på:  
<http://vbn.aau.dk/da/projects/humansensing%28f89a6e2f-3e08-46c1-992b-29f385c62ab9%29.html>

Anmyr, L., Olsson, M., Freij, A., & Larsson, K. (2015). Sense of coherence, social networks, and mental health among children with a cochlear implant. *International Journal of Pediatric Otorhinolaryngology*, 79(4), 610–615. doi:10.1016/j.ijporl.2015.02.009

Annemans, M., Audenhove, C. Van, Vermolen, H., Heylighen, A., Buildings, R., & Experiences, R. (2012). Chapter 1 Hospital Reality from A Lying Perspective : Exploring a Sensory Research Approach, 1, 3–12.

Antonovsky, A. (1979). *Health, stress and coping*. Jossey-Bass.

Antonovsky, A. (2000). *Helbredets mysterium*. Hans Reitzels Forlag, København.

Arbejdsmiljøforskningsfornden, & COWI. (2006). *Kortlægning og analyse af dansk arbejdsmiljøforskning*.

Baddeley, A. (1992). Working Memory. *Science*, 255, 556–559. doi:10.1126/science.1736359

Bang, A. L., Krogh, P. G., Ludvigsen, M., & Markussen, T. (2012). The Role of Hypothesis in Constructive Design Research, (1993), 1–11.

Beal, D. J., & Weiss, H. M. (2003). Methods of Ecological Momentary Assessment in Organizational Research. *Organizational Research Methods*, 6(4), 440–464. doi:10.1177/1094428103257361

Bengtsson, S., & Stigaard, D. L. (2011). *Aktuel Skandinavisk og Britisk Handicapforskning*.

Borg, E. (1998). Audiology in an Ecological Perspective — Development of a Conceptual Framework. *Scandinavian Audiology*, 29, 132–139.

Borg, E., Bergkvist, C., Olsson, I.-S., Wikström, C., & Borg, B. (2008). Communication as an ecological system. *International Journal of Audiology*, 47 Suppl 2, S131–8. doi:10.1080/14992020802307362

BrancheArbejdsmiljørådene (sidst revideret april 2015). *Stress og stresshåndtering*. Lokaliseret den 16.04.2015 på: <http://www.arbejdsmiljoweb.dk/trivsel/stress>

Brinkmann, S. (2014). *Stå fast - et opgør med tidens udviklingstvang*. Gyldendal Business.

Brodersen, E., Jerritslev, K., Boesen, H., Nielsen, K. O., Olsen, S. Ø., Jacobsen, N., ... Ravn, G. (1999). *Hvidbog. Den hørehæmmede i centrum*. S.I.: s.n. Retrieved from [http://audiologi.dk/wp-content/uploads/2011/05/DELTA\\_Hvidbog.pdf](http://audiologi.dk/wp-content/uploads/2011/05/DELTA_Hvidbog.pdf)

Brunnberg, E., Lindén-Boström, M., & Berglund, M. (2008). Tinnitus and hearing loss in 15-16-year-old students: mental health symptoms, substance use, and exposure in school. *International Journal of Audiology*, 47(11), 688–694.

Castberggård (2010). *Arbejdsliv og Hørelse – afsluttende rapport*. Lokaliseret den 16.04.2015 på: <http://arbejdslivhoerelse.cbg.dk/AHrapport.pdf>

Christensen, A., Davidsen, M., Kjøller, M., & Juel, K. (2010). *Mental sundhed blandt voksne danskere*. København: Sundhedsstyrelsen. Retrieved from <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:mental+sundhed+blandt+voksne+danskere#0>

Christensen, A. I., Davidsen, M., Ekholm, O., Pedersen, P. V., & Juel, Knud (Statens Institut for Folkesundhed, S. U. (2013). *Danskernes sundhed - Den Nationale Sundhedsprofil 2013*. Sundhedsstyrelsen.

Christensen, V. T. (2006). *Uhørt?: betydningen af nedsat hørelse for arbejdsmarkedstilknnytning og arbejdsliv*. Socialforskningsinstituttet.

Chung, K. (2004). Challenges and recent developments in hearing aids. Part I. Speech understanding in noise, microphone technologies and noise reduction algorithms. *Trends in Amplification*, 8(3), 83–124. doi:10.1177/108471380400800302

Clausen, T. (2003). *Når hørelsen svigter*. København: Socialforskningsinstituttet. Retrieved from <https://www.sfi.dk/Files/Filer/SFI/Pdf/Rapporter/2003/0301naarhoerelsensviger.pdf>

Damsgaard-Sørensen, K., & Madsen, B. (2003). *Stress - når kroppen siger fra*. (K. Damsgaard-Sørensen & B. Madsen, Eds.) (1st ed.). Gyldendals Akademiske



Bogklubber.

Darwin, C. (1859). *On the Origin of the Species*. Darwin (Vol. 5).

De Croon, E. M., Sluiter, J. K., & Frings-Dresen, M. H. W. (2003). Need for recovery after work predicts sickness absence: A 2-year prospective cohort study in truck drivers. *Journal of Psychosomatic Research*, 55(4), 331–339. doi:10.1016/S0022-3999(02)00630-X

Det Europæiske Miljøagentur (n.d.). *Stress, definition og symptomer*. Lokaliseret den 16.04.2015 på: [https://osha.europa.eu/da/topics/stress/definitions\\_and\\_causes](https://osha.europa.eu/da/topics/stress/definitions_and_causes)

Egbert, M., & Deppermann, A. (2012). Hearing Aids Communication: Integrating Social Interaction , Audiology and User Centered Design to Improve Communication with Hearing Loss and Hearing Technologies, 104–124.

Eller, N. H., Kristiansen, J., & Hansen, A. M. (2011). Long-term effects of psychosocial factors of home and work on biomarkers of stress. *International Journal of Psychophysiology*, 79(2), 195–202. doi:10.1016/j.ijpsycho.2010.10.009

Fellinger, J., Holzinger, D., Gerich, J., & Mental, G. D. (2007). Brief communication Mental distress and quality of life in the hard of hearing, 243–245. doi:10.1111/j.1600-0447.2006.00976.x

Forsythe, C., Liao, H., Trumbo, M., & Cardona-Rivera, R. E. (2014). *Cognitive neuroscience of Human Systems - Work and Everyday Life*. CRC Press, Taylor and Francis Group.

Fredens, K., Johnsen, T. J., & Thybo, P. (2011). *Sundhedsfremme i hverdagen*. (K. Fredens, T. J. Johnsen, & P. Thybo, Eds.). Munksgaard Danmark.

Glaser, B. G., & Strauss, A. L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. *Observations* (Vol. 1). doi:10.2307/2575405

Green, J. D., Verrall, A., & Gates, G. A. (2007). Quality of life instruments in Ménière's disease. *The Laryngoscope*, 117(9), 1622–1628. doi:10.1097/MLG.0b013e3180caa14f

Hallberg, L. R.-M., & Carlsson, S. G. (1991). A qualitative study of strategies for managing a hearing impairment. *British Journal of Audiology*, 25, 201–211. Retrieved from <http://informahealthcare.com.zorac.aub.aau.dk/doi/pdf/10.3109/03005369109>

079853

- Hastrup, K. (2005). Inkorporeret viden og praktisk kunnen. In *Perspektivet – kvalitativ forskning i arbejdsmiljø og arbejdsliv*. (pp. 45–47). Arbejdsmiljøinstituttet.
- Hegel, G. W. F. (2010). *The phenomenology of spirit*. Digireads.com Publishing.
- Jensen, N. R. (2012). *Viden om voksne mennesker med handicap*. Socialpædagogernes Landsforbund.
- Jette, A. M. (2006). Toward a Common Language for Function, Disability, and Health. *Physical Therapy - Journal of the American Physical Therapy Association*, 726–734.
- Kappelgaard, L. H., & Lund, K. (2013). Ecological Momentary Storytelling : Bringing Down Organizational Stress through Qualifying. In *Foundations of Augmented Cognition* (Dylan D. S., Vol. Volume 802, pp. 572–581). Springer Berlin Heidelberg. doi:10.1007/978-3-642-39454-6\_61
- Kocalevent, R. D., Hinz, A., Brähler, E., & Klapp, B. F. (2011). Determinants of fatigue and stress. *BMC Research Notes*, 4, 238. doi:10.1186/1756-0500-4-238
- Kramer, S. E., Kapteyn, T. S., & Houtgast, T. (2006). Occupational performance: comparing normally-hearing and hearing-impaired employees using the Amsterdam Checklist for Hearing and Work. *International Journal of Audiology*, 45(9), 503–12. doi:10.1080/14992020600754583
- Kristensen, L. K. (2013). *Overskridelse af lærerudbrændthed og ADHD-diagnosticering af børn. En social praksisteoretisk udforskning af indskolingsbørn og deres lærerteams mulighed for overskridende læring i klasserummet*. Aalborg University.
- Kristiansen, J., Mathiesen, L., Nielsen, P. K., Hansen, A. M., Shibuya, H., Petersen, H. M., ... Søgaard, K. (2009). Stress reactions to cognitively demanding tasks and open-plan office noise. *International Archives of Occupational and Environmental Health*, 82(5), 631–41. doi:10.1007/s00420-008-0367-4
- Kristiansen, M., & Bloch-Poulsen, J. (2000). *Kærlig rummelighed i dialoger - om interpersonel organisationskommunikation*. Aalborg Universitetsforlag.
- Lin, F. R., & Albert, M. (2014). Hearing loss and dementia – who is listening? *Aging & Mental Health*, 18(6), 671–673. doi:10.1080/13607863.2014.915924

- Lin, F. R., Ferrucci, L., An, Y., Goh, J. O., Doshi, J., Metter, E. J., ... Resnick, S. M. (2014). Association of hearing impairment with brain volume changes in older adults. *NeuroImage*, 90, 84–92. doi:10.1016/j.neuroimage.2013.12.059
- Lin, F. R., Metter, E. J., O'Brien, R. J., Resnick, S. M., Zonderman, A. B., & Ferrucci, L. (2011, February). Hearing loss and incident dementia. *Archives of Neurology*. doi:10.1001/archneurol.2010.362
- Lin, F. R., Yaffe, K., Xia, J., Xue, Q.-L., Harris, T. B., Purchase-Helzner, E., ... Simonsick, E. M. (2013). Hearing loss and cognitive decline in older adults. *JAMA Internal Medicine*, 173(4), 293–9. Retrieved from <http://archinte.jamanetwork.com/article.aspx?articleid=1558452#qundefined>
- Luhmann, N. (2009). *Sociale Systemer - Grundrids til en almen teori* (1. udgave,.). Hans Reitzels Forlag, København.
- Lunner, T., Rudner, M., & Rönnerberg, J. (2009). Cognition and hearing aids. *Scandinavian Journal of Psychology*, 50(5), 395–403. doi:10.1111/j.1467-9450.2009.00742.x
- Madslund, H. S., & Rydahl, K. (2013). *Arbejdsmiljø og Helbred i Danmark 2012*.
- Manchaiah, V. K. C., & Manchaiah, D. (2011). Models to represent communication partners within the social networks of people with hearing impairment. *Audiological Medicine*, 9(3), 103–109. doi:10.3109/00365521.2011.599228
- Maturana, H. R., & Varela, F. J. (1980). *Autopoiesis and cognition - the realization of the living*. D. Reidel Publishing Company, Dordrecht, Holland.
- McCraty, R., Atkinson, M., Tomasino, D., & Bradley, R. T. (2009). The coherent heart: Heart-brain interactions, psychophysiological coherence, and the emergence of system-wide order. *Integral Review*, 5, 10–115. doi:Publication No. 06-022
- Michailakis, D. (2004). Communication overload in interaction systems. *Scandinavian Journal of Disability Research*, 6(1), 37–54. doi:10.1080/15017410409512638
- Middleton, D., & Brown, S. D. (2005). *Social Psychology of Experience: Studies in Remembering and Forgetting*. London GBR: SAGE Publications Inc. US. ProQuest ebrary. Web. 6 January 2015.
- Moore, D. R., Edmondson-Jones, M., Dawes, P., Fortnum, H., McCormack, A., Pierzycki, R. H., & Munro, K. J. (2014). Relation between Speech-in-Noise

- Threshold, Hearing Loss and Cognition from 40–69 Years of Age. *PLoS ONE*, 9(9), e107720. doi:10.1371/journal.pone.0107720
- Mosnier, I. ., Bebear, J., Marx, M., Fraysse, B., Truy, E., Lina-Granade, G., ... Sterkers, O. (2015). Improvement of cognitive function after cochlear implantation in elderly patients. *JAMA Otolaryngology–Head & Neck Surgery*. Retrieved from <http://dx.doi.org/10.1001/jamaoto.2015.129>
- Most, T. (2007). Speech intelligibility, loneliness, and sense of coherence among deaf and hard-of-hearing children in individual inclusion and group inclusion. *Journal of Deaf Studies and Deaf Education*, 12(4), 495–503. doi:10.1093/deafed/enm015
- Nachtegaal, J., Kuik, D. J., Anema, J. R., Goverts, S. T., Festen, J. M., & Kramer, S. E. (2009). Hearing status, need for recovery after work, and psychosocial work characteristics: results from an internet-based national survey on hearing. *International Journal of Audiology*, 48(10), 684–91. doi:10.1080/14992020902962421
- Nachtegaal, J., Smit, J. H., Smits, C., Bezemer, P. D., van Beek, J. H. M., Festen, J. M., & Kramer, S. E. (2009). The association between hearing status and psychosocial health before the age of 70 years: results from an internet-based national survey on hearing. *Ear and Hearing*, 30(3), 302–312.
- Netterstrøm, B. (2012). Stress og belastning eller effekt. *Ugeskrift for Læger*, 174(4), 192–4.
- Nielsen, L. (2004). Engaging Personas and Narrative Scenarios. *A Study How a Usercentered Approach Influenced the*, 215(2), 353–380. doi:ISSN 1399 – 1779
- Nielsen, L., Curtis, T., Grønbæk, M., & Nielsen, N. R. (2007). *Forebyggelse og behandling af stress i Danmark*.
- Nielsen, N. R. (statens I. for F., & Kristensen, tage S. (Det N. F. for A. (2007). *Stress i danmark - hvad ved vi?*
- Peelle, J. E., Troiani, V., Grossman, M., & Wingfield, A. (2011). Hearing loss in older adults affects neural systems supporting speech comprehension. *The Journal of Neuroscience: The Official Journal of the Society for Neuroscience*, 31(35), 12638–12643. doi:10.1523/JNEUROSCI.2559-11.2011

- Pronk, M., Deeg, D. J. H., Smits, C., Twisk, J. W., van Tilburg, T. G., Festen, J. M., & Kramer, S. E. (2014). Hearing Loss in Older Persons: Does the Rate of Decline Affect Psychosocial Health? . *Journal of Aging and Health* , 26 , 703–723. doi:10.1177/0898264314529329
- Prætorius, N. (2011). *Stress - det moderne traume* (1st ed.). Dansk Psykologisk Forlag.
- Ptacek, J. T., Smith, R. E., Espe, K., & Raffety, B. (1994). Limited correspondence between daily coping reports and retrospective coping recall. *Psychological Assessment*, 6(1), 41–49. doi:10.1037/1040-3590.6.1.41
- Qvortrup, L. (2000). *Det hyperkomplekse samfund*. Gyldendal.
- Rabbitt, P. M. (1968). Channel-capacity, intelligibility and immediate memory. *The Quarterly Journal of Experimental Psychology*, 20(3), 241–248. doi:10.1080/14640746808400158
- Raudaskoski, P. (2010). Observationsmetoder (herunder videoobservation). In S. Brinkmann & L. Tanggaard (Eds.), *Kvalitative metoder en grundbog* (1st, 1st ed., pp. 81 – 95).
- Rohde, B. (2006). Mange flere patienter har psykiske belastningsreaktioner. *Arbejdsmiljø*, 9-10(3).
- Sarah Pink and Kerstin Leder Mackley. (2012). Video and a Sense of the Invisible: Approaching Domestic Energy Consumption Through the Sensory Home. *Sociological Research Online*, 17(1), 3 CHECK. doi:10.5153/sro.2583
- Sennett, R. (1998). *The Corrosion of Character - the personal consequences of work in the new capitalism*. New York: W. W. Norton & Company, Inc.
- Shiffman, S., Stone, A. a., & Hufford, M. R. (2008). Ecological Momentary Assessment. *Annual Review of Clinical Psychology*, 4(1), 1–32. doi:10.1146/annurev.clinpsy.3.022806.091415
- Sindballe, A.-M., & Hjalsted, B. (2007). *Kender du til stress? Sådan kan du gøre noget ved det*.
- Sluiter, J. K., de Croon, E. M., Meijman, T. F., & Frings-Dresen, M. H. W. (2003). Need for recovery from work related fatigue and its role in the development and prediction of subjective health complaints. *Occupational and Environmental Medicine*, 60 Suppl 1, i62–i70. doi:10.1136/oem.60.suppl\_1.i62

- Stephens, D., & Kramer, S. (2010). *Living with Hearing Difficulties: the Process of Enablement*. Wiley-Blackwell.
- Stone, a a, Schwartz, J. E., Neale, J. M., Shiffman, S., Marco, C. a, Hickcox, M., ... Cruise, L. J. (1998). A comparison of coping assessed by ecological momentary assessment and retrospective recall. *Journal of Personality and Social Psychology*, 74(6), 1670–1680. doi:10.1037/0022-3514.74.6.1670
- Strand, A. M. C. (2012). *On dis / continuous intra-active becoming of / through an Apparatus of Material Storytelling*. Aalborg University.
- Söderman, A. C., Bergenius, J., Bagger-Sjöbäck, D., Tjell, C., & Langius, A. (2001). Patients' subjective evaluations of quality of life related to disease-specific symptoms, sense of coherence, and treatment in Ménière's disease. *Otology & Neurotology: Official Publication of the American Otological Society, American Neurotology Society [and] European Academy of Otology and Neurotology*, 22(4), 526–533. doi:10.1097/00129492-200107000-00020
- Söderman, A.-C. H., Bagger-Sjöbäck, D., Bergenius, J., & Langius, A. (2002). Factors influencing quality of life in patients with Meniere's disease, identified by a multidimensional approach. *Otology & Neurotology*, 23(6), 941–948. Retrieved from [http://journals.lww.com/otology-neurotology/Fulltext/2002/11000/Factors\\_Influencing\\_Quality\\_of\\_Life\\_in\\_Patients.22.aspx](http://journals.lww.com/otology-neurotology/Fulltext/2002/11000/Factors_Influencing_Quality_of_Life_in_Patients.22.aspx)
- Tun, P. A., McCoy, S., & Wingfield, A. (2009). Aging, hearing acuity, and the attentional costs of effortful listening. *Psychology and Aging*, 24(3), 761–766. doi:10.1037/a0014802
- WHO. (2001). The International Classification of Functioning, Disability and Health. *World Health Organization*, 18, 237. doi:10.1097/01.pep.0000245823.21888.71
- Willig, R. (2009). Self-Realization Options: Contemporary Marching Order in the Pursuit of Recognition. *Acta Sociologica*, 52(4), 350–364. doi:10.1177/0001699309348707
- Willig, R. (2013). *Kritikkens U-vending*. Hans Reitzels Forlag, København.
- Wittgenstein, L. (2011). *Sidste skrifter om den filosofiske psykologi II: det indre og det ydre - 1949-1951*. Århus: Klim.
- Woolley, A. W., Chabris, C. F., Pentland, A., Hashmi, N., & Malone, T. W. (2010).

Evidence for a collective intelligence factor in the performance of human groups. *Science* (New York, N.Y.), 330, 686–688. doi:10.1126/science.1193147

World Health Organization. (2013). *How to use the ICF: A practical manual for using the International Classification of Functioning, Disability and Health (ICF)*. Geneva: WHO.

Üstün, T. B. (World H. O. (2007). THE ICF : AN OVERVIEW.

Zachariae, B. (2003). Stress i et biopsykosocialt perspektiv. In K. Damsgaard-Sørensen & B. Madsen (Eds.), *Stress - når kroppen siger fra* (pp. 14–15). Gyldendals Akademiske Bogklub.

### Links:

[www.hoeforeningen.dk](http://www.hoeforeningen.dk)

<http://www.venturecup.dk/alumni-companies/>

<http://www.sdti.dk>

<http://www.hoerelse.info/minister-i-samrad-om-daglejestoj>

<http://arbejdslivhoerelse.cbg.dk/AHrapport.pdf>

[www.cbg.dk](http://www.cbg.dk)

[www.bunker43.dk](http://www.bunker43.dk)

<http://www.nidcd.nih.gov/health/hearing/pages/coch.aspx>

<http://ucrac.dk/koncept/stressmaaling/#>

<http://ucrac.dk/koncept/pauseprogram/>

<https://www.youtube.com/watch?t=103&v=PfB2txcouh8>

<http://2013.hci.international>

<https://www.youtube.com/watch?v=JKtxqni9Vqg>

<http://katjalund.tumblr.com/>

[www.bunker43.dk](http://www.bunker43.dk)

<http://www.aarp.org/health/brain-health/info-07-2013/hearing-loss-linked-to-dementia.html>

[http://www.phonak.com/com/b2c/en/products/fm/what\\_is\\_fm.html](http://www.phonak.com/com/b2c/en/products/fm/what_is_fm.html)

<http://www.cbg.dk/jobcenter/nedsat-hoerelse/holdforloeb-bevar-dit-arbejde>

<http://www.bbc.com/news/business-34324772>

<https://en.wikipedia.org/wiki/Endomondo>



# APPENDICES

**Appendix A. Transcripts and notes.....APP1**

**Appendix B. Analysis of the dialogues.....APP99**

**Appendix C. Participant stories .....APP131**

**Appendix D. Material Storytelling.....APP136**

## Appendix A. Transcripts and notes from the dialogues

### John – dialogue, June 11 2013

Tid: 00.54 min.

1. Katja: Vi starter med at tage en lille snak og så kigger vi på dine besvarelser og din hjerterytmedata bagefter, fordi så kan vi lige starte med at få sådan et generelt billede af, hvordan det har været. Der er jo noget med systemet, der ikke fungerede optimalt. Var det spørgeskemaet, der stoppede – var det telefonen?
2. John: Ja, den gik i stå. Jeg kan ikke huske, hvad det var jeg svarede... jeg svarede på et eller andet, og så skulle jeg... da jeg var færdig med at svare på et spørgsmål, så skal den jo komme med en grøn pil...
3. Katja: Ja...
4. John: ... hvor du skal videre, og den kom aldrig. Og jeg kunne heller ikke gå tilbage, jeg kunne heller ikke lukke og begynde forfra... den stod simpelthen fast i det der.
5. Katja: Det er lidt... det er nogle af de børnesygdomme, den har.
6. John: det er børnesygdomme, ja. Men ellers så virkede den meget godt de første par dage – to en halv dag.
7. Katja: Jeg er ked af at den ikke kunne følge dig længere, men jeg håber det er ok.
8. John: Ja ja.

9. Katja: Men jeg er i hvert fald glad for, at du har været med, det du har.

Tid: 02.00 min.

10. Katja: Synes du, du har nået at få et indblik i hvad det var, metoden den gik ud på?
11. John: Ja, det er jo nok... som Christian jo har nok de største problemer med, altså, det kan hjælpe ham på en eller anden måde. Det er vel derfor, vi har lavet det.
12. Katja: Man kan godt se forskel i jeres besvarelser ja – bl.a. energi.
13. John: Altså jeg kunne da godt forestille mig, at Christian kører hurtigere træt.
14. Katja: Har du ellers lagt mærke til noget?
15. John: Næh jeg synes ellers det var godt, at man svarer på det man svarer på. Det er jo hele tiden ens eget ve og vel, eller hvad man kan sige ... man går og svarer på.
16. Katja: Er du vant til at gå og tænker over, hvordan du har det ... eller var det noget, der gav dig mulighed for at tænke lidt mere over...
17. John: Jeg har nok altid gået og tænkt lidt over det... jeg har haft to blodpropper i hjertet, og det har givet mig nogle ting hen ad vejen at tænke på også, men altså... jo jeg har nok tænkt over hvordan jeg har det i hverdagen ... om det bliver for meget, eller hvad det gør.
18. Katja: og det er jo rigtig godt at du gør det i forvejen, fordi det er noget, der kan være med til også at man bremser sig selv, hvis man er på vej ud i noget, som er for hårdt.

19. John: Jah ... i det hele taget så skal man jo tænke over, hvad det er man går og laver, og hvordan man har det med at lave det, man laver.
  
20. Katja: Hvor meget tænker du over fysisk aktivitet, sundhed og sådan noget? Det har du så også været vant til at tænke på pga...
  
21. John: Ja, det er gået lidt i vasken nu her pga. ... det er jo ... de sidste 16 år, der har jeg da dyrket motion jævnlige og ... har også løbet nogle maraton også for at holde helbredet oppe.
  
- Tid: 5.29 min.
  
22. John: Og det er jo nok det der med at tænke på hele tiden at have det godt og være velfungerende og... på den måde i hvert fald der er motion jo super godt.
  
23. Katja: Ja. Nu er jeg bare sådan nysgerrig... det lyder jo som du har levet enormt sundt og...
  
24. John: Det har jeg også. Det er jeg så holdt lidt op med desværre ... det ved jeg ikke hvorfor, men jeg tror det er sløseri et eller andet sted ... ha ha ha ha.
  
25. Katja: Men det har så været noget mere arveligt? Nu spørger jeg bare fordi jeg er nysgerrig omkring det her med blodprop i hjertet.
  
26. John: Ja, det var min far ... han fik også meget tidligt ... jeg fik dem som 40-årig. Jeg fik to blodpropper, og jeg tænkte "jamen det kan ikke passe det her... det kan ikke passe. Så usundt lever jeg sgu da heller ikke, vel" ... så prøvede jeg at lave mit liv om og begyndte at løbe og spise sundt – jeg spiste grøntsager og jeg spiste faktisk kun sundt. Det var meget sjældent vi levede usundt og vi fik øl og vin og sådan noget. Og det var også med et resultat at jeg tabte jo ... hvad fanden var det ... 12-13 kilo bare lige sådan ret hurtigt. Jeg har været helt oppe at veje 90 ikke, og det... det var jo også alt for stor, men øh...

27. Katja: Så det var faktisk efter det, at du har løbet maraton og sådan noget, eller hvad?

28. John: Ej det var så mens alt det her sygdom kom, så tænkte jeg "ej, det skulle fandeme have en ende". Så smed jeg faktisk de der 12-13 kilo og begynde faktisk at motionere... jeg har løbet 8 maraton og adskillige halvmaraton og...

29. Katja: Sejt!

Tid: 07.02 min.

30. John: Det skulle bare være sådan. Så fra dengang af, der begyndte jeg i hvert fald at tænke meget over det, hvordan livet var... på sygehuset får man jo at vide, at det her det dør man af. "Nå, det skal I fandeme ikke bestemme" ... ha ha ha.

31. Katja: Det er godt når man har en stædig indstilling til det, så...

32. John: Jeg havde det også sådan med medicin ... jeg ville ikke have medicin. Så sagde min læge – hjertelæge – han sagde "Det forfølger dig resten af livet". Nej det skulle han fandeme ikke bestemme, det var helt sikkert. Jeg fik Beta-blokker og jeg ved ikke hvad. Jeg var fandeme halvmæt, når jeg havde spist alle de her tabletter.

33. Katja: [griner] det er jo heller ikke særligt sundt.

34. John: Det var jo så lidt stædighed, der sagde at jeg ville ikke have dem. Jamen det ville han godt være med til det forsøg der... Og så kom jeg i løbet af et år ... der var jeg faktisk ude af alt det medicin.

35. Katja: Det har så også krævet en ekstra stor indsats i forhold til sundhed.

Tid: 08.00 min.

36. John: Jeg havde også et halvhøjt kolesterolindhold osv. De tabletter kunne jeg så ikke tåle – det var sådan nogle muskelkramper, man fik, så dem VILLE jeg af med. Det var så også meget imod hans vilje, altså.
37. Katja: Så du bruger slet ikke noget medicin nu?
38. John: Nej nej overhovedet ikke.
39. Katja: Det er jo fantastisk. Men alligevel vil jeg sige det der med at der skal et eller andet til for at få en til at vende blikket lidt indad, og ”hvordan har jeg det”? Altså ét eller andet, der gør, at man bliver opmærksom på fysik og det mentale.
40. [Baggrundsstøj af mennesker der snakker udenfor døren.]
41. John: Mmm... ja. Og så kom der sådan noget med ørerne her, og så tænkte jeg ”nå jamen det kan da heller ikke være rigtigt, at man... det er jo så bare sådan.
42. [Telefon ringer]
43. Katja: I løbet af de der to en halv dag... det var ikke så lang tid, men så kan man alligevel sige, at i og med at du i forvejen var så vant til at tænke over, hvordan du har det, tænker du så at det har været med til at give dig noget i forhold til at se nogle sammenhænge fx? Eller var du så bevidst om det i forvejen? Fordi det lyder lidt som at du ligesom har tænkt, ”jamen der er nogle sammenhænge med sundhed og alle de her ting”. Der er ikke noget der overrasker dig i den måde, du har svaret på? Fx at du har følt dig presset og så alligevel har svaret at du har masser af energi, eller et eller andet, hvor du sådan er blevet opmærksom på nogle sammenhænge?
44. John: Altså jeg er jo opmærksom på netop tinnitus fx, og det er jo den, der trætter. Det tror jeg på. Og hvis det er for overvældende med tinnitus, så kan jeg godt mærke, at så forsvinder energien simpelthen. Så kører det jo bare hele tiden.

45. Katja: Har du markeret det som støj [i skemaet]... som indre støj? Og hvordan har du givet udtryk for, når der sådan har været tinnitus? Nu er jeg bare nysgerrig på... altså ku' du få den 'med'.
46. John: Der bliver spurgt om, hvordan man har det med energi i løbet af... og den har jeg markeret bare som dalende. Det er pga. tinnitus. Det er jeg slet ikke i tvivl om.
47. Katja: Det er faktisk vigtigt for mig at få med, for der er jo mange, der har tinnitus sammen med et høretab. I hvilken grad er der tinnitus? Er det slemt lige nu eller ej? Det kunne måske godt være noget, der skulle med.
48. John: Ja, det var måske en god idé, fordi jeg er slet ikke i tvivl – det er den, der i den grad irriterer mig, og det er jo garanteret også den, der tager ens energi jo. Fordi den konstante hyletone – du kan næsten ikke lade være med at gå og tænke på den. Også selvom du har en masse andet at tænke på, ikke. Så hører du den ind imellem. Så skal man skrue mere op for høreapparaterne – så hører man mere udefra. Men så skruer du fandeme også op for så meget andet støj, ikke også.

Tid: 11.41 min.

49. Katja: så bliver man jo også mere træt i hovedet, for så skal man forholde sig til flere ting. Det er klart.
50. John: Jeg var også til... var det før eller efter... hvornår var det at du var her?
51. Katja: Jamen det var den 27. ... den 27. maj jeg var her.
52. John: Der havde jeg ikke været i Sønderborg, nej. Jeg har lige været dernede nemlig. Og der prøvede jeg at få lavet en masse tests dernede både med og uden høreapparater. Og det viser sig, at jo mere jeg skruer op for mine høreapparater, jo mere hører jeg faktisk ikke, fordi... det giver meget mere støj. Men det tager min tinnitus, når jeg skruer op for det, fordi så hører jeg bare støjen i stedet for. Så hører jeg ikke tinnitussen, vel.

53. Katja: Så du har rent faktisk fået skruet lidt op?
54. John: Ja, det har jeg jo så, men øh...
55. Katja: Har du følt dig mere træt efter det?
56. John: Nej, jeg regulerer jo stadig selv, men øh... der er da ingen tvivl om, at tinnitus det er den store årsag til at man bliver træt... i mine ører og øjne i hvert tilfælde.
57. Katja: Ja, ja... men det er jo klart.
58. John: Men det kan jo godt være man kan lægge nogle programmer ind om lige netop tinnitus.
59. Katja: Det tænker jeg, at man måske godt kunne have et eller andet.
60. John: "Har du tinnitus lige nu?" fx eller...
61. Katja: Bare sådan en hurtig knap man lige kunne... igen kunne det måske også være en grad ... om man ingen har eller... for det kan jo også svinge. Jamen det er rigtig godt lige at få det med, John. Det er jeg glad for ... Øhhmm... jeg tænker på om der er nogle særlige tidspunkter, du har tænkt på i løbet af de dage, hvor du har tænkt "det her det skal jeg lige have kigget på ... min hjerterytmeariabilitet.
62. John: Jamen jeg er meget spændt på at se den der hjerterytme der.
63. Katja: Med mindre du tænker, at du har noget, hvor du har været lidt oprevet, eller du har været ude at motionere, eller der var jeg meget afslappet eller et eller andet, så kan vi gå ind på besvarelserne og se, hvad har du egentlig svaret. Bare gå ind helt nysgerrigt og se på, hvordan er sammenhænge i forhold til dit humør og energi, oplevelse af



sammenhæng, og hvordan hænger det så sammen med hjerterytmen. Og vi plukker bare nogle situationer ud og går ind og kigger på, og så skal jeg nok lige vise dig, hvordan din hjerterytme ser ud, når du sådan er normalt afslappet og når du sådan går og arbejder ude...

64. John: Er der stor forskel?

**Tid: 15.17 min.**

65. Katja: Man kan godt se forskel, ja. Når du sover f.eks. Den der forskel på hvordan kroppen er afslappet. Det man kan sige, hvis der ser ud til at være en grad af ikke-afslapning, jamen så er det nok fordi kroppen er i en eller anden form for stresstilstand. Det tror jeg nu ikke, at den er ved dig.

66. John: Neej.

67. Katja: Jamen så lad os gå ind og kigge på det, med mindre du har andet, du gerne vil snakke om inden. Du kan også skrive til mig, hvis der er noget, du kommer i tanker om.

68. John: Ja, det kan være der kommer noget.

69. [Kigger sammen på computeren]

70. Katja: Vi kan se at det er gået fint med besvarelser den 27. Maj – de er gået fint ind. Der er godt nok to her, men det er fordi den skal uploade, og der har lige været nogle netproblemer. Det er måske den fra omkring 12.30, ikke, der ligger der. Og den er så først kommet op sammen med den besvarelse 13.42, ikk’.

71. John: Ok, ja.

72. Katja: Der er en 11.30, så det passer meget godt, at det er den igen. Der er nogle ting, som lige skal justeres i det her for at det virker, men ellers kan du se... jeg skal nok lige sende dig et link, så du selv kan gå ind at kigge

her. Det har jeg skrevet i min kalender, så det gør jeg senere i dag. Men ellers kan man jo så høre de der lydclip, og det kan du jo selv styre...

73. [der høres et lydclip fra opstarten af testforløbet af Christian, der taler]

**Tid: 17.38 min.**

74. Katja: Så der har du heldigvis også lavet en masse af dem. Her kan vi se, hvor du er henne. Nej, det kan jeg ikke... nu røg jeg af igen.

75. John: Det kan være de har lukket – der er jo eksamen.

76. Katja: Nåh ja, det kan være det er det. Nej der kom den... vi prøver lige at se. Se der kan vi se, at du er her på skole.

77. John: Mmmm...

78. Katja: Så der kan du også få en hjælp til, hvis du ikke lige kan huske ”jamen hvad var det lige, jeg lavede der”, så det er primært til støtte. Men jeg kan se generelt, at din energi er egentlig ok. Den er lidt dalende her hen ad eftermiddagen, og om aftenen... dér sidder du nok og slapper af. Der er en dør.

79. John: Ja, det ved jeg ikke, hvorfor jeg har taget det [griner].

80. Katja: Nej nej, men det var nok et eller andet, hvor du så... [man hører larm fra en optagelse] ... er det støvsugeren...?

81. John: Jeg tror faktisk det er vores vaskemaskine.

82. Katja: Nå ja. Men det er egentlig sjældent, at der er dårlig kommunikation hvor du synes der er et eller andet i lytte forholdene, der ikke er godt. Der er lige et par gange her... det ved jeg ikke hvad skyldes... kan du huske det?

83. John: Der bliver støvsuget...
84. Katja: Nå, dér bliver der i hvert fald støvsuget ja. Så der er jo i hvert fald noget i lytte forholdene der ikke er optimalt. Dér er du nok her på skolen [refererer til den anden markering af dårlig kommunikation]. Der er et eller andet som... eller hvad... jo det er da her på skolen.
85. John: Jo, det er det.
86. Katja: det kan være et eller andet, der lige har gjort det. Men du kan se, at alle éttallerne betyder, at der har være udmærket kommunikation. Og totalerne betyder, at der har været et eller andet i vejen for at der har været ordentlige lytteforhold eller et eller andet. Meeen ellers starter du jo med god energi igen den næste dag og den 29. har du også god energi. Øøøøhhmm... Humøret har været fint...
87. John: Ja.
- Tid: 20.31 min.
88. Katja: Kommunikationen... du har nok været på arbejde de her to dage den 28. og den 29.
89. John: Ja, det har jeg.
90. Katja: Så har der været lidt svingende med støj... der er nogle dage, hvor du synes der har været ret meget støj. Og det kan selvfølgelig også have noget at gøre med din tinnitus eller et eller andet... Jeg ved ikke, men...
91. John: Du kan se, den står på ni ved den allerførste.
92. Katja: Dér ja, og det er egentlig fordi den skal vendes om. Og det har jeg sagt til udviklerne, at de skal lige vende den om, fordi det betyder faktisk ingen støj.

93. John: Nå ok.
94. Katja: Og det er lidt misvisende, fordi man skulle tro, det var meget støj. Den der med nul, den er jeg faktisk i tvivl om, hvad den betyder... om den betyder, at der ingen støj er, fordi jeg kan ikke umiddelbart høre noget støj her... [lytter til optagelse] ... så det må egentlig betyde, at der ikke er noget støj her...
95. John: Hvordan ser billedet ud her? [kigger på billedet] Jamen det er inde på værkstedet. Der kan meget vel være ingen støj der.
96. Katja: Det er fordi de ligger tæt op ad hinanden dér, så jeg skal lige have dem til at lave det om. Den der det betyder så, at der faktisk er ret meget støj.
97. John: der sidder jeg inde på kontoret... der burde slet ikke være noget støj.
98. Katja: Nååhh... Nå, det ved jeg så ikke lige, nu skal jeg lige se en af dem, der ligger i den anden ende. Den der... [lytter til optagelse] Jamen der sidder vi også og snakker. Nu er jeg lidt forvirret over den der. Dén der, den ligger sådan midt i... det passer meget godt, du er ude at køre... lad os lige se hvordan den ligger længere nede. Dér... der er du inde på værkstedet... jamen det kan da godt være, at de har fået det vendt om. Jeg bad dem nemlig om at se på det, så det kan være at de har rettet det... jeg havde egentlig sagt, at de måtte godt vente, fordi ellers ville det blive for forvirrende.
- Tid: 23.13 min.
99. Katja: Nå, men i hvert fald kan man se, at du har været i rimelig god... de her tre omkring oplevelse af sammenhæng... de har ligget fint... der er ikke nogen steder du ryger langt ned – du ligger i den høje ende af skalaen hele vejen igennem. Det giver et billede af, at du føler dig overnpå og at du synes, det giver meget god mening, og der er ikke... man kan sige at det der med overblik f.eks. Hvis man ikke har overblik...
100. John: ...ja så er der heller ikke noget der giver mening og man er ikke i balance med noget.

101.Katja: Og du kan måske føle dig stresset, hvis der er for mange opgaver du ikke har overblik over...

102.John: ja

103.Katja: så det er meget godt... det viser at du er, hvor du skal være...

104.John: ja det kan man jo håbe [griner]

105.Katja: Sådan ser det i hvert fald ud. Dit humør er også rigtig godt... der er lige lidt om eftermiddagen... det er der hvor der bliver støvsuget... [begge griner]... der er det ikke helt i top, men du ligger alligevel ret højt sådan med oplevelse af sammenhæng. Der synes du også der er en del støj... jeg er godt nok lidt i tvivl om det er den lave eller den høje [refererer til opsætningen af værdierne]

106.John: Det er i hvert fald i den høje ende det der...

Tid: 25.00 min.

107.John: Hvad siger vi... fire dér hvor hun støvsuger... det er jo mindre [værdi], må det være... jo mere støj. Hvad er det dér?

108.Katja: der er du ude at køre – der kan det også godt være, at du oplever støj... kan du huske det?

109.[lytter til optagelse]

110.John: Neej... nej...

- 111.Katja: Kan du huske hvad...nej. Og du er... det ser ud som du er ude at køre alene, ikke. Du er også herude af ... [kigger på kort]... er det her?
- 112.John: Det er her på skolen ja.
- 113....
- 114.Katja: Så kan vi gå ind og kigge på din hjerterytme her... er der noget du har lyst til at kigge specifikt på? Nu skal du se her... nu flytter jeg den lige lidt længere over til dig. Så går vi ind og kigger, vi læser det sådan, at det her ude, det er hvor mange millisekunder, der er imellem hvert hjerteslag.
- 115.John: Ja.
- 116.Katja: Og jo mere det svinger jo mere er du afslappet. Dvs. Hjertet det banker ikke bare sådan med faste mellemrum, og det vil sige, at den måde vi vil kunne se om du er udsat for et eller andet fysisk eller noget udfordrende, det er at der bliver kortere tid imellem, og at vi rykker længere ned og der bliver kortere imellem... og så har jeg kigget med en 15-20 minutters mellemrum. Og det er her, vi starter op. Og du er meget afslappet. Du ligger her og svinger enormt fint her. Man kan godt se, at du er i en god fysisk form faktisk. Det kan godt være, at du siger, at du ikke er meget fokuseret på det lige nu, men du ser ud til at være i en god fysisk form.
- 117.John: jamen det er jeg også sådan nogenlunde, ja.
- 118.Katja: så der er ikke noget videre udslag her. Så kan vi se, om der sker noget et eller andet sted... var du også i gang med at gøre rent her eller...
- 119.John: Nej, det er hende, der gør det. Det har jeg folk til [begge griner].
- 120.Katja: Er der noget sted, hvor du tænker, at man burde kunne se et udslag?

121.John: Jamen det burde man kunne med det der støvsugning f.eks. Man burde kunne se noget.

122.Katja: Ja... Og det er 17.53. Nu går jeg lige igennem dagen [refererer til HRV-målingerne]. Der allerede. Så skal jeg lige se... reset zoom... så går jeg ind og åbner den næste... Den er lidt længere. Der er sket eller andet... den er blevet slukket allerede den 27. Så den starter først igen den 28. Om morgenen andet end den her fra den 27. Og den går kun til 11.30. Så må der være sket ét eller andet. Med den dér.

123.John: Ja, det var den 27.

124.Katja: Ja, det var den første dag. Du får den så på igen her den 28. om morgenen. Og hvor lang tid kører den så der? Det er heller ikke så længe... så kører den til 13.30. Gad vide, hvorfor de er så korte... Jeg går ind og ser, hvor meget vi har. Den 29. har vi hele dagen fra morgen til aften, men de andre dage har vi kun halv... eller lige nogle timer. Og hvorfor, det skal jeg ikke kunne sige.

125.John: Næh, det ved jeg heller ikke. Kan den ikke have siddet ordentligt på, eller....

126.Katja: det kan sagtens være. Men det ser faktisk ud som om den er gået helt ud der. Om der er et eller andet i vejen med den... det skal jeg have fundet ud af. Om den måske går ud. Fordi det kunne godt se sådan ud. Så det skal jeg lige have fundet ud af, om den har en fejl. Men i hvert fald kan vi se her.... Du svinger fint, og jeg stopper, hvis man kan se udslag.

Tid: 34.05

127.Katja: Det man kan se her... der er du lige vågnet sikkert, ikke.

128.John: Jo.

129.Katja. Det ligner morgenaktivitet... her er du i gang med dine morgen-gøremål. Kan det passe at du vågner deromkring?

130.John: Ja, kl. 6 ja.

131.Katja: Ja, der er du i gang med alle mulige ting... den ligger sådan nede [referer til HRV-værdien]. Den er igen kort... jeg ved ikke hvorfor. Der er ikke noget specielt at læse ud fra den der, så jeg tager lige den næste. Det er igen den 28. Og det er så fra kl. 8.30... der går jeg lige ind og kigger på et kvarter... du kan f.eks. se, at dér er der lidt mere aktivitet. Det er kun sådan lige et minuts tid, men man kan se, at den flader lidt ud... selvfølgelig er der forskel på hvis man f.eks. sidder her og går ned ad gange mod spisesalen.

132.John: Ja, det er klart, der er væsentlig forskel.

133.Katja: så jeg tænker, at det her er sådan som det ser ud, når du er på arbejde og i gang med dine gøremål.

134.John: Ja.

135.Ved 9-tiden går du nok og laver nogle ting ude på værkstedet...

136.John: Ja, ja.

137.Katja: Der ligger du i et fint flow... du ligger og svinger fint... du er ikke helt afslappet, men det ser fint ud fysisk. Der er heller ikke de der udsving, som jeg tænker skyldes at den har svært ved at få ordentligt ved. Det gør den jo ikke her. Men det ser jo meget ens ud her hen ad. Der er ikke de vilde...

138.John: udskejelser...

139.Katja: Nej. Det kører. Det, der jo så er rigtig sundt, er at man en gang imellem kommer ud og får pulsen sådan virkelig op, men altså det er jo så det, der gør, at man kan have en god grundform.



- 140.John: Men der er alligevel en forskel, for før var den på 800... nu er vi oppe på 1200.
- 141.Katja: Ja, du må faktisk være rimelig afslappet dér. Enten står du og sysler med et eller andet. Jeg vil næsten tro, at du står eller sidder stille. Du er meget afslappet her. Det kan godt være at du går rundt her, så der sker et eller andet...
- 142.John: 10.55
- 143.Katja: ja, der sker der et eller andet. Ellers så er du bare afslappet, når du går og laver tingene.
- 144.John: Jamen det synes jeg også, at jeg er.
- 145.Katja: Men det ser rigtig fint ud, sådan som det ligger umiddelbart. Så er du lidt mere fysisk i gang her.
- 146.John: Ja, der daler den lidt igen.
- 147.Katja: Går I til frokost der, eller hvad sker der?
- 148.John: Nej, der plejer først at være ved halv et tiden.
- 149.Katja: Ok, så der laver I noget andet. Der er sådan lidt mere udsving igen der, som om du lige har gang i et eller andet. Og her.
- 150.John: Der er også en der ja.
- 151.Katja: Så er I inde og siddet til noget frokost.
- 152.John: Ja.

153.Katja: Der kan man også godt se en forskel, ikke.

154.John: Jo, det kan man faktisk godt se.

155.Katja: Det ser også ud som om du får din hvile i pausen, men så er den jo desværre stoppet der. Det er den 28. Men så har vi den 29. Der er en lang dag, men det var jo så desværre der, hvor den her [refererer til log-systemet] stoppede tidligt. Kan du huske noget fra den 29.? Der er en fra kl. 9 og kl. 4. Kan du huske hvad tid, den stoppede helt?

156.John: Jamen det begyndte faktisk allerede om formiddagen.

157.Katja: Ja, og så har du fået den lidt i gang igen, og så er du holdt igen. Og så har den måske ikke villet sende besvarelser af sted. For der er du så hjemme igen, ikke?

158.John: Jo.

159.Katja: Kan du huske noget fra den dag? Det var lidt træls med spørgeskemaet.

160.John: Hvad dag var det...

161.Katja: det var den 29.

162.John: Mandag...

163.Katja: Nej... onsdag.

164.John: Jeg var i hvert fald her på skolen hele dagen kan jeg se.

165.Katja: For vi kan gå ind og se - hvis vi tager et lidt større billede med en halv time ad gangen - hvordan har det været den dag... vi kigger lige på [kigger på data]... 9.08 har du besvaret.

166.John: Ja, 9.08

**Tid: 42.28 min.**

167.Katja: ...har du besvaret. Den falder ret meget...

168.John: Det var så lige inden...

169.Katja: Kan det passe? Jeg synes der er meget kort imellem... den er meget.... Det var lige inden, ja. Kan du huske om der skete noget der onsdag?

170.John: Nej, det kan jeg faktisk ikke. Jeg gik faktisk inde på lærerværelset det meste af dagen. Formiddagen i hvert fald.

171.Katja: ....Jeg laver lige sådan vi kan se et kvarter ad gangen, fordi billedet ændrer sig meget fra gang til gang. Altså hvor lang tid man har imellem. Det er også som om den kikser lidt... som om den ikke har ordentligt fat... fordi den ryger ned der.

172.John: Ja.

173.Katja: Men ellers ligger den jo meget fint. Men det er lidt ærgerligt, at jeg ikke lige kan vise dig, hvordan det ser ud om natte f.eks. Så kan jeg vise dig, hvordan det ser ud, når man er helt i hvile. Så vil jeg tro, at din ligger og svinger helt deroppe, fordi du er i god fysisk form.

174.Igen der ikke også... 9.08, det er svært at sige, hvad det er. Nu kigger vi den bare lige igennem, om vi kan se et eller der kommer til udtryk. Man kan se at du arbejder igen her. Du er i gang med noget fysisk. Du er ikke helt afslappet.

175.John: Jamen det er også efter frokost.

176.Katja: Er Christian her om onsdagen.

177.John: Ja, han er her hver dag men halve dage.

178.Katja: Men det ligger fint. Jeg tror ikke der rigtig kommer noget, John.

179.John: Nej, det tror jeg heller ikke. Tinnitus behøver vel heller ikke gå ind og påvirke ens hjerte, gør det det?

180.Katja: nej jeg tænker det mere oplevelsen af træthed, hvor man egentlig godt kan være rigtig træt mentalt, men hvor kroppen godt kan være afslappet, indtil trætheden måske sætter sig som stress. Så bliver kroppen også påvirket. Måske kan vi se det målingerne. Det er her henne omkring kl 4...

181.John: Ja, det var kl. 4.

182.Katja: Man kan ikke se nogen forskel.

183.John: Nej

184.Katja: Det kunne godt lige ligne besvarelsen, du går i gang med dér [begge griner]. "Så for Søren, nu skal jeg lige..." men det er jo kun gætterier. Der kan vi kun lige... Men det er klart, hvis man er meget mentalt træt pga. tinnitus, og hvis man så bliver ved med at presse på, så ville man nok kunne se det.

185.John: Ja, det ville man helt sikkert.

186.Katja: Men prøv at se, du ligger sådan virkelig godt og svinger. Der er også lige der omkring halv seks.

187.John: Ja, der daler den lidt der.

188.Katja: Det kan være du bare er på vej et eller andet sted hen. At du er gået i gang med madlavning eller hvad ved jeg [begge griner] hvis du laver sådan noget...

189.John: Jo jo.

190.Katja: Fordi det er også tit man kan se de der aftenaktiviteter, hvis man går i gang med madlavning og praktiske ting og skal ordne det ene og det andet og det tredje.

191.John: Jeg elsker at lave mad.

192.Katja: Jamen det er da dejligt. Og så er man netop lidt i gang. Du er i god fysisk form og virker ikke stresspåvirket.

193.John: Nej jeg er ikke stresspåvirket – det nok mere irritation. Hvis man har tinnitus sådan en hel dag, så kan jeg godt forestille mig at så er man kørt ned, når man er færdig med at arbejde. Det der så også er, er at når jeg kommer hjem, så smækker jeg lige bene op på bordet. Det er ikke ensbetydende med at jeg sover, men bare slapper af.

194.Katja: Det er jo også en måde du har fundet ud af der fungerer for dig.

195.John: Ja, jeg får lidt skæld ud for det en gang imellem [begge griner] men det skal hun sgu lære at leve med.

196.Katja: Sådan er det. Ej men kan du mærke at den der tinnitus den går dig på en gang imellem?

**Tid: 53.30 min.**

197. John: Ja, en gang imellem gør den. Der er nogle dage, hvor man tænker "hold da kæft mand, kunne man da aldrig blive foruden det her?" Det er der heldigvis ikke hver dag, og heller ikke hele dagen vel.
198. Katja: Og det ville måske være sådan noget, man ville kunne fange gennem spørgeskemaet, hvis du svarede igennem længere tid.
199. John: Ja, ja. Altså det der er med tinnitus... altså lige nu har jeg ikke noget. Så kan det kommer sådan her [knipser]. Og så er det der bare. Det kommer som en hyletone - det er som at trykke på en knap. Og det vil jeg godt vove at påstå, at det kunne man garanteret se der, fordi man er virkelig opmærksom på det.
200. Katja: Også fordi du har prøvet det før, så du er virkelig opmærksom på at det her det varer så og så lang tid, og der er jo noget der gør, at du ikke bare tænker skidt med det. Du ved, at du bliver træt.
201. John: Ja, så enten hvis jeg har høreapparaterne på tager jeg dem af, eller hvis jeg ikke har dem på så tager jeg dem på, og så skruer jeg op, og så forsvinder det nogenlunde hurtigt.
202. Katja: Det er jo godt, at du kan gøre noget ved det nu med høreapparaterne.
203. John: Jah, det er da dejligt også. Det er værre for dem, der ikke kan gøre noget ved det. Sådan en som Christian, jeg tror ikke han kan gøre noget ved det.
204. Katja: Det er måske også en anden form for tinnitus man har, når man har CI. Jeg kender mange, der har det i hvert fald, som har fået CI... Ja, men jeg er selvfølgelig ked af... jeg kan ikke lige fortælle dig, hvorfor den er sprunget af. Jeg håber at du har fået et nogenlunde indblik...
205. John: Ja, jeg kunne sådan set godt have gået med det hele ugen, men den der [refererer til mobiltelefonen] den opgav jo. Jeg kunne simpelthen ikke få den til at gå ud af det der... det var som om den var fastlåst.

- 206.Katja: Det skal vi simpelthen... det bliver også bedre, når vi får den som en app til sin egen telefon. Det er jo selvfølgelig det, der er ved stadig at være i en udviklingsfase. Så det beklager jeg. Men jeg håber du alligevel har fået noget ud af det. Jeg er i hvert fald glad for at du har været med.
- 207.John: Der er da også nogle ting man sådan har gået og lagt mærke til, når den nu bippede eller ”nu skal du lige svare her” ”nå, ja” ... sååå man bliver da lidt mere opmærksom på alle de ting, der foregår omkring én.
- 208.Katja: Og inde i én måske også?
- 209.John: Også det ja.
- 210.Katja: Og det er jo det, vi lidt håber også, at man kan med det her. Uanset hjerterytmemålinger osv. Så tvinger det én til lige at blive opmærksom på nuet. Det er jo godt, hvis du også synes, at det ligesom har gjort det, fordi...
- 211.John: jamen det har det, det synes jeg da.
- 212.Katja: Forhåbentlig er det noget, du også kan bruge til et eller andet, og forhåbentlig så vil du gerne være lidt med fremad, hvis jeg har nogle spørgsmål.
- 213.John: Du er meget velkommen i hvert fald. Og skal vi prøve det igen en gang, så gør vi da bare det. Det var jo Christian der fik mig med, og det er jo rart at man kan gøre noget for andre.

Tid: 60.00 min

Afslutter

## Christian – dialogue, June 11, 2013.

KL

Så... så tror jeg den optager. Jeg kunne godt tænke med at vi starter med at snakke og bagefter kigger vi på resultaterne. Det er ikke et interview – det er nærmere en refleksion. Så jeg er nysgerrig uden at have forventninger til noget som helst. Jeg har selvfølgelig været inde og kigge på dine resultater, men jeg kan ikke vide, hvordan du har oplevet det her forløb. Jeg kan have nogle formodninger om, at du måske er kommet til at tænke lidt mere over, hvordan du eller din krop reagerer i bestemte situationer, men jeg kan ikke vide det. Så jeg kunne egentlig godt bare tænke mig at høre lidt om forløbet: nogle tanker - hvordan har systemet fungeret? Hvordan synes du ugen generelt har været?

TL

Det krævede lidt en tilvænning med alt det udstyr ud over det vi i forvejen har på baggrund af høretab. Det var lidt en stressfaktor for mig – i hvert fald den første dag – og lige finde ud af hvordan teknikken reagerede, og hvad kan jeg gøre hvis nu det opfører sig anderledes end forventet eller var blevet instrueret om. Men efter den første dag begyndte jeg bare at gøre det, når nu den brummede den her telefon. så begyndte jeg bare at gøre det uden at tænke over det. Jeg begyndte også at gøre det uden at tænke over svarene her og nu. Uden at reflektere over"...hvordan svarede jeg, var det nu rigtigt..." osv. Jeg svarede bare på hvordan jeg havde det her og nu. Men det gav da selvfølgelig nogle tanker omkring mit medfødte hørehandicap; hvordan har min krop kunnet kompensere for det på anden vis i forhold til hvis jeg havde været normalthørende. Det er ikke noget jeg ellers har tænkt nærmere over, men det har det her (red. testforløbet) bl.a. været med til at få mig til at tænke over. At man har brugt sin krop på en anden måde som kompensation for sit høretab. Det er jeg overbevist om. Men om man så... ja selvfølgelig er man også anderledes i nogle situationer.



KL

Tænker du på, at man fysisk er mere på vagt, eller...?

TL

Ja, altså...måske ikke på vagt, men mere opmærksom. Jeg har i hvert fald observeret, at jeg ser flere ting før alle andre ser dem... med mit syn. Og det kunne jeg godt forestille mig er en kompensation for mit høretab.

KL

Ja, det er jo sådan noget man hører om, at når man mangler én sans eller den er reduceret, så kompenserer de andre sanser.

TL

Ja, og så tænker jeg også jamen har det også noget at gøre med de indre organer... kompenserer de også på en eller anden måde? Det at vi har skullet gå med den her hjerterytmemåler har fået mig til at tænke over om andre af kroppens funktioner også fungerer anderledes som en slags kompensation for høretabet? Det kunne jeg godt forestille mig.

KL

Der er jo også en sammenhæng mellem fysikken og hvordan man har det rent psykisk. Og hvis hjernen er på overarbejde, kunne man godt forestille sig, at kroppen også kan være det, ikke?

TL

Ja, jamen det er jeg også helt sikker på. Nu her i forbindelse med at jeg fik CI i 2009 har jeg haft en periode – og det har jeg stadigvæk – hvor jeg bliver lettere forvirret, fordi jeg får nogle nye lyde ind for det første, som jeg ikke har kunnet

høre tidligere. Men for det andet også, jeg kan ikke...ehh...organisere, hvor lyden kommer fra. Det er tit og ofte at jeg først hører lyden komme fra venstre side af, fordi det nu er venstre side, jeg har fået CI, ikk', men så kommer bilen eller andre støjkilder fra højre, og det har været trættende. Og der har jeg en idé om at hjernen måske er på overarbejde i den sammenhæng.

KL

Og jeg tænker da også, at man bliver lidt forskrækket, når man lige pludselig opdager, at det man regner med kommer fra venstre side kommer fra højre side, altså det må gøre et eller andet rent fysisk også idet man lige kommer i sådan en kortvarig stress.

TL

Ja ja, men det gør det. Og det tror jeg sker også ubevidst. Det har jeg en oplevelse af nogle gange, at jeg oplever ting uden at tænke over det, men som kroppen reagerer i forhold til på én eller anden måde.

KL

Ja, for du kan måske ikke nå at tænke dybt over alle de reaktioner.

TL

Nej det er rigtigt, det kan jeg ikke. Jeg er videre hele tiden, ikk', men jeg har en idé om at jeg bliver påvirket af nogle ting, som jeg enten negligerer fordi jeg har fokus på noget konkret ikk', men som kroppen optager og reagerer i forhold til. Fordi jeg kan somme tider være så møghamrende træt – ikke fysisk på den måde men sådan rent mentalt og hovedet og har... og jeg forstår ikke altid hvorfor. Og det tror jeg er fordi kroppen har ageret i forskellige situationer uden at jeg egentlig selv har været bevidst om det i hjernen. Det er jeg sikker på, at der er en sammenhæng dér. Og så tænker jeg også nu hvor vi har gået med den hjerterytmemåler... er hjertet også på overarbejde hele tiden? Nu har jeg heldigvis et almindeligt sundt helbred... blodtrykket er ikke for højt i hvert tilfælde. Men jeg er bevidst om at lade være med

at komme op i 'det røde felt', hvis jeg kan, for det kommer der som regel aldrig noget godt ud af.

KL

Har du nogle ting, du gør, hvis du er ved at bliver frustreret?

TL

Ja, der trækker jeg mig tilbage, så jeg ikke er nødt til at forholde mig til andre ... andre former for kommunikation. Og det har jeg brug for.

KL

Og du kan genkende de situationer, når de kommer? At "nu er det nødvendigt at jeg lige trækker mig, for ellers bruger jeg mig selv for meget" eller hvordan tænker du?

TL

Ja, det kan jeg mærke, men det er da også kun i kraft af, at jeg er blevet opmærksom på de signaler som kroppen nu fortæller mig eller omgivelserne fortæller mig, at "...nu er du på vej til at bliver frustreret eller vred, og så er det bedre at du forlader det sted, du er, og så lige falder til ro igen".

KL

Hvordan tænker du den her metode... kan den være med at man bliver mere bevidst om hvordan man reagerer og hvordan ens krop reagerer?

TL

Ja, altså hvis man kan få et resultat ud af den information, man har tilbagesendt igennem en periode... hvis man kan få et resultat ud, der viser, hvordan man reagerer, så tror jeg godt det kan give noget feedback til nogle mennesker, der har brug for at ændre på deres måde at være på.

KL

Men også i selve den uge der, at man også bliver tvunget ind i at forholde sig til "...hvordan har du det lige nu? Hvordan er din energi...?"

TL

Ja, det giver også én nogle signaler til, hvad var det der fik mig til at gøre det her? Så bliver man bevidst om det. Det er der absolut ingen tvivl om.

KL

Er der noget, du har studset over i dine egne besvarelser?

TL

Altså der har været nogle enkelte episoder, hvor jeg bare har svaret sådan uden at tænke så meget over svarene og så bagefter "...var det nu rigtig...?" sådan lige et kort øjeblik "...ja, ok, det var fint nok". På den måde kommer man ind og reflekterer over dine egne tanker og handlinger, mens du er i forskellige... og det vil åbne op for ens bevidsthed, helt sikkert. Det vil fortælle én... lære ens eget jeg at kende bedre på nogle lidt andre måder.

KL

Ja, du bliver lidt mere tvunget ind i at opleve nuet og opleve dig selv i nuet... det er sådan lidt det.

TL

Ja, det gør man – ingen tvivl om det! Og det vil kunne hjælpe én... man vil kunne hjælpe sig selv meget hen ad vejen.

KL

Også hvis man nu fx fortsætter med de der besvarelser... der får man jo, altså du har jo din egen profil inde på nettet, og der kan man med tiden... altså vi arbejder jo stadig på systemet... men der kan laves noget statistik, fx ”du været meget træt i dag”, eller ”det har ikke rigtigt givet mening for dig de ting, du har lavet i dag”, at man sådan kan få lidt feedback. Det ville måske også være godt?

TL

Det vil være en god indgangsvinkel til sit eget jeg forstået på den måde, at hvis man vil hjælpe sig selv – også på den lange bane – hvis man vil undgå nogle... måske ikke sygdomme men nogle psykiske lidelser... mange gange er det jo fordi man har haft det skidt i en meget lang periode, og så bliver man ramt af noget sygdom på baggrund af det.

KL

Og måske også sådan lidt ubevidst at man har gået og haft det skidt, hvor man bare er blevet rullet ind i det ligeså langsom og så lige pludselig er man sunket helt ned i det, og så...

TL

Ja, der vil jeg tro at sådan et system som det her vil kunne stoppe mange mennesker og få dem til at tænke over at ændre deres adfærd.

KL

Ja, og måske også bede om hjælp før det går galt?

TL

Ja, det er jeg sikker på.

KL

Har der ellers været nogle særligt stressende episoder du har oplevet den forløbne uge?

TL

Som jeg nævnte lige inden vi gik i gang, så var der den første dag, fordi jeg lige skulle håndtere den nye teknik, fordi jeg havde mit eget også, og mobiltelefon osv. Men det at jeg skulle svare har da også været lidt en stressfaktor ind imellem... jeg var bl.a. med som bisidder ved en jobsamtale på jobcentret i Skanderborg sammen en der også bruger CI – der var jeg lidt stresset, fordi jeg samtidig skulle være på med det møde der.

KL

Hvad sagde de til det?

TL

Jamen de syntes det var fint nok... det var ok. Det var der ingen problemer i, men jeg blev alligevel påvirket af situationen.

KL

Det er klart, ja. Det er selvfølgelig også én af grundene til at det er hen over en hel uge, så man måske når at vænne sig til systemet og besvare og alle de der ting. At man sådan skal forholde sig til den der ekstra mobiltelefon. Og man kunne jo forestille sig, at hvis nu man havde det på sin egen telefon som en app derpå, så ville det måske også være mindre stressende, fordi man kender sin egen telefon bedre. Så forhåbentlig kan den, når den kommer som almindelig app, at det så vil kunne gøre det lidt mindre stressende på den måde.

TL

Hvis den kan komme på ens egen telefon vil det være et godt skridt i den rigtig retning. Men så er der selvfølgelig også det, at den arbejdsrelaterede situation i forbindelse med at man står midt i et eller andet og så skal man til at svare igen. Men i det store billede synes jeg det var ok.

KL

Har der været situationer, hvor du har følt stress i forbindelse med nogle andre ting i løbet af ugen?

TL

Nej, det synes jeg egentlig ikke.

KL

Godt. Jeg tænker, at vi lige skal notere, hvis der er nogle tidspunkter i løbet af ugen, som du kunne tænke dig at komme ind og kigge nærmere på. Jeg tænker i hvert fald den første dag, hvor du får udstyret på og hvor det driller og hvor den bliver ved med at brumme, at vi skal ind og kigge på, hvad sker der? Hvad sker der med din hjerterytme? (...) Jeg tænker vi skal sidde og kigge på og sammenligne, hvordan havde du det dér, hvis vi kigger på spørgeskemabesvarelsene? Følte du at kommunikationen var god eller dårlig? Var der støj? Hvordan var dit energiniveau? Hvordan var din oplevelse af sammenhæng? Humør? Osv. Og så sammenholder det med hjerterytmemålingerne. Så du får lov til selv at være mere med i selv at læse hjerterytmemålingerne. Så skal jeg nok fortælle dig lidt om, hvordan man læser

dem og hvad man kan læse ud af dem. Og så går vi ind og kigge på det, du godt vil vide noget mere om... hvordan har min krop det, når jeg ror kajak? Når jeg er sammen med min familie? Kontra når jeg er på arbejde eller til møde, ikk'?

TL

Der er én situation, jeg er kommet til at tænke på. Det er når jeg sidder til pauserne sammen med lærerkollegerne og eleverne inde og får formiddagskaffe eller et eller andet. Og der kan jeg altså bare ikke kommunikere rent ud sagt. Jeg kan selvfølgelig lige med sidemanden og den overfor, men hvis der pludselig er nogen der siger noget til mig nede i den anden ende af bordet... det... og det kan jeg mærke, at det påvirker mig. Men om jeg bliver stresset af det, det ved jeg ikke, om jeg gør, men det påvirker mig i en eller anden omfang i hvert tilfælde. At jeg ikke kan opfange hvis der kommer noget kommunikation længere væk fra til mig.

KL

Det er klart, du bliver også mere træt, for du skal bruge flere kræfter i den situation.

TL

Altså det er ikke en afslappet pause, som det egentlig er.

KL

Så det kan godt være du ikke bliver mere stresset, men du bliver måske mere træt og det påvirker nok overskuddet bagefter, eller?

TL

Jamen det gør det. Og det er også derfor jeg siger, at ind imellem har jeg bare time out. Der trækker jeg mig lige tilbage, trækker vejret dybt ind, og er lidt bevidst om det og får tankerne til at komme lidt ned på normalt leje igen. Og så er jeg klar igen.



KL

Så det viser også lidt vigtigheden af de pauser.

TL

Efter sådan en formiddagspause, der kan jeg godt bruge 5 min inden jeg reelt går i gang igen, ikke. Fordi "...hvad skete der lige her i den her pause...?"

KL

Oh måske lige lukke øjnene og finde en form for ro? (...) Var der noget, du syntes, du manglede at kunne fortælle om i forløbet? Eller var der noget, der var for meget?

TL

Altså, der var en der kom op i mig nogle gange: at vi ikke lige skulle beskrive "hvad tænkte du?" "Hvad tænker du nu?" fx Hvad tænker du i den situation, du skal svare?

KL

Godt du siger det, for det er måske tit de tanker man lige mangler at kunne beskrive, og kan man lige finde tilbage til de tanker, man havde lige der? Den skal jeg se om vi kan få med som svarmulighed, hvis man har tid til lige at skrive, hvad man tænker lige nu.

TL

Ja, det kan jo godt være kortfattet: "Hvad skal du i aften?" Tænker du på hvad du skal efter arbejde eller er det familien derhjemme? Eller hvad det nu måtte være for

den enkelte. Eller er det noget, der lige er sket, man tænker på? Det må også kunne bidrage med noget.

KL

Det vil jeg tage med til udviklerne – så kan vi se, hvor vi kan putte det ind henne. Er der et sted, du har tænkt, at det var naturligt at putte det ind? Omkring humør eller...?

TL

Altså de tanker du har er også med til at farve det du svarer: er du i godt humør eller... og det er jo mange gange de tanker, man lige har, og det synes jeg ikke rigtigt man får lejlighed til at beskrive ganske kort: Hvad tænker du? Til at underbygge de spørgsmål, man nu skal svare på.

KL

Jeg er rigtig glad for at du siger det, for den har jeg ikke tænkt på og jeg har heller ikke hørt det fra andre. Det er ikke noget problem at få det ind et eller andet sted som en mulighed hvis man har lyst og tid til lige at svare.

TL

Ja, ellers kan man bare springe over jo, hvis man ikke lige er i en situation, der gør at man kan skrive kort om det. (...)

*Snak ved overgang til dataanalyse. Vi kigger på HRV-målingerne sammen med spørgeskemabesvarelsene:*

KL

Det kan godt se ud som om der har været en lidt løs forbindelse med de høje nogle, den laver der.

TL

Ja, den faldt også af nogle gange.

*Jeg starter med at give et overblik over, hvad jeg umiddelbart ser ud fra besvarelserne:*

KL

Jeg prøver lige at åbne en af de andre for at se om det ser anderledes ud... Nej det er lidt det samme, men hvad det betyder... om det er fordi der ind imellem... ja det ser lidt sådan ud. Nu er jeg jo vant til at kigge efter stress, men det ser anderledes ud. Nå men lad os starte med den første dag, hvor jeg kommer og fortæller, og man kan se på... der er intro og der er billeder. Efter introen er du ude og ordne et gelænder, og der er energien faldende. Det er nok noget med alt det her... du skriver du er træt og der har været meget kommunikation og information. Du har været meget på. Og det her med telefonen, der brummer konstant. Det er klart at det påvirker din energi rigtig meget og det hænger måske også sammen med dit humør. Der ser det ud til at der er en sammenhæng: du kan se... et højt tal her er høj energi og et højt tal her er højt humør. Det ser ud som om der er god sammenhæng.

Så har der også været noget knas i kommunikationen, og der tænker jeg at du nok både svarer, hvis der er meget støj eller hvis der er noget andet teknisk... jeg kan se at du også nogle gange svarer, når du ser fjernsyn, hvis lyden ikke er god – der er lidt knas i kommunikationen.

TL

Der havde jeg også lidt tvivl om, hvad der mentes med det. Hvad var indgangsvinklen i forhold til det med støj? Er det når der er meget støj udenfor mig? Eller er det når jeg selv har nogle dårlige lydmæssige forhold? Det er jo et meget bredt begreb det der med støj.

KL

Ja, det med støj, der skal tallet faktisk læses omvendt, hvilket er forvirrende. Det taler jeg med udviklerne om, så det bliver lettere at læse. Men ja, støj, hvad er det for dig? Er det dårlige lydforhold? Eller handler kommunikationen om dårlige lydforhold for dig?

TL

Ja, og hvad var det for en situation, jeg skulle forholde mig til? Eksempelvis situationen hvor jeg sidder sammen med lærerne og eleverne. Der er jo masser af støj og dårlig kommunikationsforhold for mig. Men det er jo ikke ens betydende med at jeg ikke kan sidde og snakke med den overfor mig, vel. Så hvor tolker jeg lige hende, om det er et problem eller ej?

KL

Præcis. Og det er her denne dialog er vigtig, fordi så kan du gå ind og sige, jamen jeg synes egentlig at kommunikationen med den person, jeg sad overfor, den var god. Men i det hele taget var der dårlige kommunikationsforhold, og derfor har jeg beskrevet det sådan her.

TL

Og det er det, jeg ikke lige kan huske, hvornår var hvad i forhold til når jeg skulle svare på støj-forholdene.

KL

Ok, det kan jeg godt forstå, for den havde vi måske heller ikke været så meget inde over.

TL

Der er nogle forskellige indgangsvinkler til, hvornår er der god kommunikation og hvornår er der dårlig kommunikation.

KL

Ja, man kunne måske vælge at sige, at god/dårlig kommunikation, det handler kun om, når jeg kommunikerer med et andet menneske, eller man kan vælge at sige at det mere overordnet handler om lytte-forholdene. Så det er måske noget af det vi skal være skarpere på i introen: hvordan vil du tolke på situationer, og så lægge sig fast på, om man går ud fra lytte-forhold eller jeg går ud fra den interpersonelle kommunikation. Men du er primært gået ud fra lytte-forhold, er det rigtigt? Sådan læser jeg det.

TL

Jo, det er jeg. Men det er noget jeg er kommet til at tænke nærmere over i løbet af ugen: hvad er det lige det handler om her, ikke. Også i forhold til at sidde hjemme og se fjernsyn. Er det det jeg kan høre fra fjernsynet, kan jeg høre, hvad der bliver sagt eller kan jeg bare høre, at der er noget?

KL

Det kunne jeg nemlig også godt se, at der var en situation, hvor du havde siddet alene og set fjernsyn, men der var dårlig kommunikation. Jeg tænkte det måtte være lytteforholdene, måske lyden fra fjernsynet, der ikke er god. Eller der er noget i lytteforholdene, der ikke er i orden.

TL

Ja, og det er det, jeg har svaret på. Men jeg oplevede at mit udgangspunkt for at svare på kommunikationsspørgsmålet var forskelligt. Nu fx her på arbejdet, hvis jeg har haft en god snak med en person, men der var omstændigheder omkring mig, der

gjorde at det ligeså let kunne have været en elendig kommunikation. Men det fik jeg ikke lejlighed til at beskrive.

KL

Ja, og der kunne det måske igen være godt at kunne beskrive, hvad du tænker lige nu: fx jeg har god kommunikation med min kollega men lytteforholdene er dårlige. Det kunne man jo godt skrive. Man kunne også skrive det omvendt, hvis en kollega har talt med ryggen til og du føler at der var noget du ikke har fanget helt, men hvor vedkommende bare er gået og du står tilbage med en usikkerhed, men at der egentlig er helt stille omkring jer. Så kunne det også have været omvendt at der var dårlig kommunikation med min kollega, men lytteforholdene var gode. Så der kunne man måske også udspecificere endnu mere og have en, der hed "lytteforhold" og kommunikation skal så forstås i forhold til mennesker.

TL

Ja, nu nævnte du lige den situation dér fra 3. mands side. Jeg kan godt høre, at der er noget, men jeg kan ikke høre, hvad der bliver sagt eller om det specifikt er til mig, og så får man det lidt træls, ikk'. Og jeg ved på forhånd, at selvom jeg spørger igen, så vil jeg stadig ikke kunne høre det, hvis lytteforholdene er elendige. Så et eller andet sted opgiver jeg på forhånd fordi erfaringen fortæller mig, at jeg ville ikke høre det alligevel.

KL

Nej, og det er jo ikke et enestående tilfælde. Det er jo noget, du og andre i din situation oplever tit.

TL

Ja, jeg oplever det dagligt.

KL

Hvis vi kigger her kan man også se at du er meget træt, men du er faktisk alene. Der er støj, dårlige lytteforhold?

TL

Ja, jeg kan ikke mobilisere det overskud der skal til for at jeg kan få gode lytteforhold. Det handler også om hvad du selv har i dig af overskud i den situation.

KL

Så kigger vi videre. Var det der hvor den brummede ofte? Kan det passe at den brummede med 10 min. interval?

TL

Ja, der var et eller andet omkring middag, der brummede den hele tiden.

KL

Ja, man kan se at den har brummet 11.38, 11.47 og 11.55. Det er jo helt skørt. Men den er kommet fint med igen. Hvad der er sket ved jeg ikke, men den er i hvert fald gået i hak på en eller anden måde.

Nu går vi ind og kigger på 15-min intervaller (HRV-målingerne) og det man kan se... (forklarer data-læsningen). Det her det er hvor lang tid der er imellem hjertelagene og det er det, der varierer. Der er ikke det samme tidsrum imellem hele tiden. Og det skal helst variere, for hvis det ikke varierer så meget kan det være tegn på stress. Det kan også betyde at man er i gang med fysisk aktivitet – så er det jo godt, fordi så betyder det, at man er ude og dyrke motion eller sådan noget, og det er jo fint i perioder, men det skal helst ikke se sådan ud hele tiden. Og det ser faktisk ligesådan ud, hvis man er i en stresstilstand... jeg kan lige prøve at finde... her kan du se, det varierer meget. Så kommer vi herhen og så falder den lidt. Dvs. der bliver lidt kortere tid imellem (hjerteslagene). Jeg ved ikke... de der høje nogle,

jeg ved ikke om det er fordi den ikke sidder helt ordentligt. Måske smutter den lidt engang imellem. Har du egentlig fået undersøgt hjertet?

TL

Ja, det har jeg for længe siden.

KL

Fordi ellers er det tegn på, at der lige pludselig går enormt lang tid imellem hjerteslagene.

TL

Ok, med de høje der?

KL

Ja fordi jo længere den kommer op, jo længere tid går der imellem. Det er millisekunder der går imellem hjerteslagene. Så når man ligger hernede går der 600-800 millisek. imellem hjerteslagene, og det ligger og varierer fint. men det ser altså ud som om der ind imellem går lang tid imellem to hjerteslag. Jeg kan ikke sige dig med sikkerhed, at det ikke er udstyret, og jeg ved ikke hvad det betyder, for jeg kigger kun på hvor meget det flader ud. For hvis det begynder at flade ud... måske kan jeg finde et sted hvor den gør det mere... kan du huske et tidspunkt, hvor du har været fysisk aktiv? Du har i hvert fald været ude at ro i kajak.

TL

Ja.

KL



Så kan vi finde den... det var den 28. maj (*kigger i spørgeskemabesvareelserne under aktivitet*) så hvis vi finder den kan jeg prøve... (kigger)... hvad tidspunkt var det? 19.30? Nej, det er nok fordi du har været ude på vandet, så det har måske været 15.30, 16... nej 17, 18.30. Så hvis vi tager...

TL

Den der er der to gange åbenbart.

KL

Nej det er simpelthen fordi den uploader data trådløst, og den har måske ikke kunnet uploade ude på vandet, så den har uploaded tre besvareelser, da du er kommet ind hvor der har været net.

TL

Nåh, ok.

KL

Det er også noget vi skal have lavet om, så man bedre kan se tidspunkterne for besvareelser. Men jeg kan regne ud at hvis de kommer med en times interval, så er det 16.30, 17.30, 18.30, 19.30, 20.30, ikke? Så hvis vi tager der ved 18-tiden...

TL

Ja.

KL

Se her løber den lidt mere jævnt, og det er tegn på, at du er mere fysisk i gang. Se den er meget fladet ud her, og du ligger sådan lige omkring 500. Er du stadig i kajak der?

TL

Ja.

KL

Der er du i fysisk aktivitet. Den er flad og ligger langt nede. Dvs. dit hjerte er lidt mere i gang og løber lidt mere regelmæssigt, med jævne mellemrum. Jeg kan se, du er nok stadig i kajak herhenne...?

TL

Jah, hvornår kom vi ind? Det kan jeg ikke rigtig huske.

KL

Hvis vi kigger mellem 21 og 22, er du ved at være hjemme igen der? I hvert fald ved 22-tiden.

TL

Ja.

KL

Her kan du se, at før lå den mere fladet ud helt nede omkring 500.

TL

Ja (begeistret).

KL

Og nu er den helt oppe omkring 800 og ligger og svinger meget mere. Det er simpelthen din hvilepuls, der ser sådan ud.

TL

Okay.

KL

Og så er det når du er i aktivitet, så ryger den ned og bliver mere flad. Men det vil være lidt det samme hvis man ser en stresstilstand – så vil den også blive mere flad. Så det var bare for at vise dig hvordan det ser ud, når du er i fysisk aktivitet.

TL

Hvad kan man læse ud af det?

KL

Nu kan vi gå ind på nogle bestemte tidspunkter, vi gerne vil kigge på. Umiddelbart synes jeg godt det kan se ud som om at din krop måske er lidt på vagt hele tiden?

TL

Ja, men det er også... altså forsvarsposition det er også et stærkt ord, men det er den vej på.

KL

Du er måske altid en lille smule vagtsom på, hvis der kommer nogle lyde?

TL

Ja.

KL

Dyrker du ellers noget motion?

TL

Ja, så cykler jeg en gang imellem – og går. Men jeg er ikke sådan til teamsport på den måde. Men individuelt og sammen med nogle få venner til kajak. Natur og sådan noget. Og så forsøger jeg at spise sundt og holde mig i form på den måde.

KL

Man kan også se, hvordan det ser ud, når du sover om natten. Der kan man se, at den svinger meget mere.

TL

Ja ok (nysgerrigt).

KL

Man kan f.eks. se, at dér slapper du af.

TL

Der er jeg på omkring de 800 der.

KL

Ja, men den svinger meget mere end ved det billede vi så før. Og der kan man måske sige, at når du er helt afslappet, når du sover, så ser det sådan ud. Men om dagen er du i en øget form for vagtsomhed.

TL

Jamen det passer meget godt.

KL

Dit hjerte slapper i hvert fald mere af om natten. Hvornår plejer du at gå i seng?

TL

Ved 23-tiden, men hvis jeg ser en film kan det da godt bliver midnat.

KL

Men du er også godt afslappet her om aftenen, vil jeg sige. Det svinger godt her.

TL

Men jeg har heller ikke altid høreapparaterne på her om aftenen, fordi jeg bare trænger til at hovedet det skal slappe af.

KL

Jamen du slapper også godt af, kan man se. Og det er helt naturligt, at man er mere afslappet, når man sover den dybe søvn. Men hvis vi skulle kigge på nogle tidspunkter kunne vi jo tage den første dag med problemerne med telefonen. Var det lige omkring 11.50?

TL

Ja, det var lige der hvor jeg ikke forstod hvorfor telefonen ikke reagerede som den skulle.

KL

Og her kan man så også se... jeg prøver lige fra 11.45 til... altså du er jo ikke helt afslappet som du er om aftenen. Den ligger med kortere interval og mere fladet ud end den gør om aftenen. Nu ved jeg ikke om måske går og laver nogle ting der... det gør du jo faktisk, ikke?

TL

Jo jo.

KL

Du går og arbejder, så der kan det være rigtig svært at se forskellen på om du går og arbejder med noget fysisk. Så der hvor man rigtigt kan se det, er når man er i en konfliktsituation eller en situation hvor kroppen lige pludselig reagerer og man får hjertebanken. Det kan man se tydeligt. Det skal også lige siges, at jeg endnu ikke ved om man vil kunne sige noget om kroppens generelle stressniveau. Det skal jeg have en ekspert ind over for at kunne sige noget om. Vil man kunne sige noget om kroppens generelle stressniveau. Det kan godt være at man ikke føler sig stresset, men at kroppen er det, og det vil jeg gerne vende tilbage til dig med. Der skal jeg

simpelthen have en vejleder på, der kan hjælpe mig med lige præcis det. For jeg kan kun gå ind og kigge på lige nu...

TL

...hvordan hjertet er i forskellige situationer...

KL

Ja. Er man fysisk eller psykisk udfordret, det kan jeg se nu og her. Og var der nu et tidspunkt... nu kan vi jo lige gå lidt længere ned, fordi der var faktisk et tidspunkt her hvor du er lav på energi... middagspausen er måske også et tidspunkt, hvor det kan være svært.

TL

Ja det...

KL

Her kan man se... kommunikationen og lytteforholdene er ikke gode. Din oplevelse af sammenhæng er egentlig fin, men dit energiniveau er helt nede.

TL

Ja ja, men det er det.

KL

Der kunne vi godt gå ind og kigge på hvordan din krop har det i den situation. Men det er næsten dig, der skal sige, om det er den situation, du gerne vil kigge på, eller...

TL

Ja, jamen det vil jeg meget gerne. Også netop som du var inde på lige før: jeg kunne godt tænke mig at vide om hjertet er på overarbejde hele tiden og om kroppen er i en stress-situation hele tiden.

KL

Det vil jeg rigtig gerne have lov at vende tilbage med – det er ikke sikkert at jeg når det inden sommerferien, men jeg gemmer dem her. jeg skal jo også lige lære at læse dem ordentligt.

TL

Der var også en anden situation, jeg kom til at tænke på. Det var det her i forbindelse med kajak: hvordan har jeg det lige bagefter sådan en motionstur? Også i forhold til når jeg skal snakke med andre lige efter sådan en strabadserende tur.

KL

Ok, men skal vi kigge på frokostpausen først? Det var også den 28. Der er der igen problemer med upload af besvarelsenerne. Går du til frokost 12.30?

TL

Ja, 12.30.

KL

Og hvad lavede du inden det? Der er du på arbejde og i gang med noget fysisk aktivt arbejde, ser det ud til. Det ligner nogle af dine almindelige gøremål og den almindelige aktivitetstilstand. Sådan ser din HRV-måling typisk ud, når du er i gang



med noget arbejde... Så kan man se at du går til frokost her og får sat dig ned, og det ser faktisk ud som om din krop er mere afslappet, du sidder ned og kroppen slapper mere af. Jeg kan se, at du er mere afslappet, men jeg kan ikke se, hvordan du har det og oplever det. Jeg kan samtidig se, at der er ikke den store forskel (*mellem fysisk aktivt arbejde og frokostpausen*), så du sidder ikke og slapper fuldstændig af, for der så vi jo på billedet før, at det ligger helt oppe omkring 800-1000, når du er helt afslappet. Så du er jo helt klart ikke afslappet i din pause.

TL

Nej, det er jeg ikke. Det vidste jeg godt, men det er bekræftet nu. Det havde jeg på fornemmelsen i hvert fald.

KL

Så det kan være, at der er noget, du skal overveje at lave om, fordi du måske skal have en pause, hvor du for alvor slapper af... hvor du sætter dig ind og mediterer eller bruger noget mindfulness eller et eller andet. For hvad jeg kan se, så kommer den afslappede periode ikke. Der er måske egentlig her, hvor du ser mere afslappet ud.

TL

Jamen der er jeg så også kommet hjem.

KL

Det er rigtigt, ja. Og der kan man altså se forskel. Og det er jo egentlig lidt interessant at man kan se forskel.

TL

Ja, der kl. 13 – 13.15 er jeg kommet hjem og har taget høreapparaterne af.

KL

Ja, og dér sover du faktisk middagslur (sammenligner med spørgeskemabesvarelsenerne) og det er jo faktisk lidt sjovt, at jeg kan se den forskel bare ved at kigge på HRV-målingerne uden at kigge på spørgeskemabesvarelsenerne først. Så kroppen fortæller også en hel masse, ikke? Og jeg pludselig kan se, hov... det giver et godt billede af når du er på arbejde hvor anstrengende det egentlig er, når du ikke får de afbræk og pauser, når andre måske sidder og slapper af og hygger sig. Så det giver selvfølgelig noget at tænke over.

TL

Ja, det gør det.

KL

Skal vi lige se, hvad den der middagslur gør for dig? ...der er du lige vågnet... hvornår starter du?

TL

Jamen det svinger lidt: 13.30-13.45. Jeg sidder lige og koger ned, inden jeg kravler ind og får en lur.

KL

Ja, der ser det ud som om du bliver mere og mere afslappet dér. Der ligger du nok ned... Men det ser ud som om det tager lang tid, før din krop er helt nulstillet. Men så her... så begynder der at ske noget, kan du se det? Der går faktisk helt til 14.07, før du for alvor begynder at slappe af.

TL

Ja, det kan jeg godt se. Der sover jeg simpelthen. Men det er rigtigt som du siger, at jeg kan ikke bare komme lige hjem og smide mig. Jeg skal lige af med høreapparaterne og koge lidt ned med noget vand eller det sidste af morgenkaffen. Så først ca. en halv time efter jeg kommer hjem kan jeg begynde at lægge mig for at sove lidt.

KL

Ja, og der snorksover du simpelthen, og det er garanteret rigtig godt for dig.

TL

Ja, det har jeg brug for.

KL

Ja, for vi kan se dine besvarelser efter det hvordan du ligger... du er bare helt i top. med både energi og humør, så det er jo fantastisk hvad det gør for dig.

TL

Ja, men jeg har brug for den der.

KL

Men fordi du har arbejdet meget med dig selv i forhold til dit høretab, så vidste du det jo også godt i forvejen. Nå, men så kommer du ud med kajakken, og så skulle vi lige kigge på efter det... men vi kan i hvert fald se her, at dér vågner du igen, ikke?

TL

Jo, det passer med tiden.

KL

Det er 14.41... Nu skal jeg også snart lade være med at tage mere af din tid – du skal jo ud og arbejde igen.

TL

Ja, men det er faktisk interessant det her. Og det bekræfter mig i nogle ting.

KL

Vi er snart igennem... nu kigger vi lige på det... se nu er du så i gang igen (*vender tilbage til HRV-målingerne*) ...så skulle vi ind og kigge på efter du havde været ude i kajakken... nu kører jeg bare lige igennem her...

TL

Der er jo tit noget socialt (efter kajakroning), og nogle gange har jeg noget energi og andre gange er jeg bare helt... så kan jeg ikke...

KL

Man kan se at du slapper godt af og humøret er helt i top, så det har helt sikkert været godt med det sociale og humøret er godt, du er opløftet efter sådan en tur ud i kajak. Det kan godt være at energien falder igen, men det er også typisk om aftenen, at den gør det, når man sidder og er træt. Men her går jeg hen til... hvornår er det du sejler ud i kajakken?

TL

Det er der fra kl. 18.30-19.30. Der er noget... (*kigger sammen på skærmen*)

KL

Så har den lige været af... det kan være du lige har været i bad?

TL

Ja, det har jeg.

KL

...hvis vi laver sådan et billede hvor vi ser 15 min. ad gangen... så er du tilbage og har været i bad... her ser du faktisk ud til at være ret afslappet. Det ser faktisk rigtig fint ud der. Og ligger der indtil du går i seng. Nu skal jeg lige se hvornår du gør det. Der sker i hvert fald et eller andet der.

TL

Ja, jeg satte den fast med et stykke plaster på et tidspunkt.

KL

Ja, jeg har været ved at bestille nye, der er bedre til langtidsmonitorering. Men kan det passe at du begynder at gå i seng her, fordi der er du helt i ro?

TL

Ja, det kan godt passe.

KL

Du sover måske ikke helt endnu. Så er der et eller andet der, hvor den også er faldet af, eller...?

TL

Ja, den er faldet af.

KL

Men du har fået den på igen. Jeg skal lige se om vi kan se hvornår du er faldet i søvn. Det kan godt nogle gange være svært at se. Men dér sover du vist. Der ligger den og svinger omkring de 1000. Og så er den faldet af igen, du har måske vendt dig lidt, og så er den lige...ha ha ha... så det er ligesom det, vi kan se. Jeg ved ikke hvad der kommer herhenne...

TL

Jeg kan godt huske at om morgenen, der lå den ved siden af mig på sengen...

KL

(Griner lidt) den har været sådan semi... og så ind imellem har den lige fået ved. Det er godt nok. Der ligner det REM-søvn. Det ligner en aktiv søvn. Den flader ud. Det ligner en let drømme-søvn.

TL

Nåh på den måde. Ok. Så er man forbi den dybe søvn?

KL

Ja, det er ikke den helt dybe søvn, du er i. Så får den lidt løs forbindelse igen herhenne. Men så er den faktisk på igen om morgenen, hvor du vågner, ikke?

TL

Jo, den lå ved siden af mig da jeg vågnede og så tog jeg den på igen så godt jeg kunne.

KL

Hvornår står du op om morgenen?

TL

Det passer meget godt at det er ved 6-6.30 tiden. Men jeg er også oppe og gå en tur der omkring kl. 4.

KL

Nå, der er du oppe at gå natur?

TL

Ja, det sker at jeg skal op på toilettet eller have et glas vand.

KL

Ok. Men det er jo smart, når du går ind... har jeg sendt dig link til din profil?

TL

Nej

KL

Så kan du faktisk selv gå ind og se, hvor du er henne...

TL

Jeg ved at min kæreste også er meget interesseret i at vide noget mere om det her i forskellige situationer, ikke.

KL

Hvis nu jeg kunne komme på nettet, kunne jeg vise dig, at man kan se, hvor man har været henne ved at klikke her. Men er der ellers noget nu, hvor du tænker at... nu har du fået et indblik i, hvordan din krop reagerer i forskellige situationer.

TL

Jeg kan kun nikke bekræftende. Det billede der passer meget godt overens med hvordan jeg i de forskellige situationer også har følt det selv, ikke. Så det er jo bare fint.

KL

Det er jo rigtig fint, at du har et godt selvbillede. men vi har også snakket længe nu, Christian. Er du ikke træt?

TL

Jo, det begynder jeg at kunne mærke, ha ha ha...



KL

Tror du ikke vi skal holde snart med det her, fordi vi kunne godt blive ved med at sidde og kigge i det, men...

TL

Jo, det tror jeg også at vi skal, men jeg vil da gerne at jeg kan komme ind...

KL

Jeg sender dig linket.

*(afslutter)*

### **Hovedpointer:**

1. Pauserne er svære og han har svært ved at kommunikere, hvilket påvirker ham. Han opnår ikke målet med en pause, hvis man tænker det skal være afslapning. Han bruger gerne fem minutter på at finde ro efter en pause, for at få kræfter til at fortsætte arbejdet igen. Det er tydeligt, at der er en forskel i graden af afslapning omkring pauser og måltider, når man betragter HRV-data: John' HRV viser tegn på øget afslapning og der er tydelig forskel på, når han er i gang med fysisk aktivt arbejde og når han har pause. Christians HRV ændrer sig derimod ikke, når han kommer ind og sidder i spisesalen efter at have været engageret i aktivt arbejde. Spørgeskemabesvarelserne støtter op om dette, idet hans besvarelser omkring måltiderne viser lav energi, oplevelse af dårlig kommunikation/dårlige lytteforhold samt en høj grad af støjpåvirkning.
2. Christian synes det har været en stressfaktor den første dag med teknikken, og han synes der var mange tekniske ting, han har skullet forholde sig til, når han også har CI og bruger FM-system. Men efter den første dag føler han, at han vænnede sig til testsystemet og har svaret intuitivt uden at tænke for meget over besvarelserne og det at han skulle gøre det (argument for at lave et længere forløb).
3. Han er kommet til at tænke over, hvordan hans krop rent fysisk er påvirket af høretabet i forhold til at kompensere for høretabet: andre sanser og indre

organer. Også at både hjernen og det fysiske er påvirket af at han nogle gange bliver forvirret over hvor lyden kommer fra og bliver forskrækket, fordi han har fejltolket, hvor en lyd kommer fra. Han reflekterer videre, at han tror det ofte er ubevidst at hans krop og psyke reagerer på netop dette, og at han ikke når at blive bevidst om, hvor ofte hans krop egentlig er på overarbejde og reagerer på påvirkninger, der skyldes nedsat hørelse. Dette begrundes han i, at han ofte er utroligt mentalt træt, og at han ikke altid forstår hvorfor, idet han egentlig ikke føler, at han har været særligt belastet. Efter at have gået med hjerterytmemåleren er han nervøs for, om hjertet måske også er på overarbejde hele tiden.

4. Christian har allerede mange hørestrategier, han benytter sig af. Eksempelvis trækker han sig fra potentielt frustrerende lyttesituationer, og han har arbejdet meget med sig selv og med at opbygge bevidsthed omkring hvilke signaler kroppen sender, når han er på vej til at blive frustreret. Han tænker at, såfremt man kan få et resultat af besvarelserne, der viser hvordan man reagerer i forskellige situationer, så tror han at metoden kan være med til at hjælpe mennesker til at blive mere bevidste om, hvilke strategier, man skal vælge i disse situationer. Ligeledes mener han, at metoden kan være med til at øge selvbevidstheden idet man bliver mere reflekteret omkring egne handlinger og reaktioner. Man bliver tvunget ind i at opleve sig selv i nuet. Han mener, at man vil kunne hjælpe sig selv bedre, hvis man får et mere tydeligt selvbillede. Hvis man kan få mere individuel feedback på besvarelserne med lidt statistik på enkeltdele og sammenhænge vil man kunne hjælpe sig selv bedre og dermed undgå nogle psykiske lidelser, der ofte er bygget op over lang tid, hvor man ikke har været bevidst om, hvordan man egentlig har haft det. Og man vil med systemet blive i stand til også at bede om hjælp tidligere.
5. Der har været situationer, hvor han synes det har været stressende at skulle besvare spørgeskemaet, men det ville være mindre stressende hvis det var en app, man kunne besvare på sin egen smartphone. Men i det store billede synes han det har været ok.
6. Christian savner at kunne beskrive i spørgeskemaet, hvad han tænker nu og her i svarsituationen: hvad 'fylder' lige nu (fortid, fremtid etc.). Det bør være en af de første svarmuligheder, da det er med til at understøtte, hvordan man ellers har det og dermed kan man måske bedre besvare de øvrige spørgsmål, da tankerne er med til at forme f.eks. humør.
7. Sammenhæng mellem humør og energi – de følger hinanden.
8. Christian har haft svært ved at vurdere, om god/dårlig kommunikation betyder gode/dårlige lytteforhold eller om det handler om, hvorvidt kommunikationen med et andet menneske er god eller dårlig – det interpersonelle. I pauserne er der f.eks. meget dårlige lytteforhold, men derfor kan han godt have en god dialog med en enkelt af kollegerne, som han sidder ved siden af, mens han ikke kan høre de andre. Hvordan skal han tolke? Hvilken vinkel skal han tage osv.? Her bliver dialogen særligt vigtig for at kunne vurdere, hvilken vinkel, der er besvaret ud fra, ligesom det er vigtigt at få det vendt i introforløbet, hvordan den enkelte vil tolke i

forskellige situationer: lytteforhold eller interpersonel kommunikation.  
Christian har primært tolket ud fra lytteforholdene.

## **Thor – dialogue, September 2013**

KL: Hvordan har du oplevet ugen?

T: Lige i starten syntes jeg det var lidt underligt, men spændende fordi du blev lige pludselig tvunget til at tage stilling til hvordan har du det egentlig? Føler du ikke du har overblik... Hvad er det egentlig for nogle situationer, du er i? Hvorfor synes du egentlig du mister dit overblik? Hvad synes du går dig på? Og det synes jeg da er rigtig spændende at give sig tid til selvransagelse, hvis man kan sige det på den måde. At blive opmærksom på sig selv. Hvordan går du egentlig og har det i din dagligdag? Altså hvad foretager du dig egentlig[griner]? Det kom lidt bag på mig.

KL: Det var da spændende at høre, synes jeg.

T: Ja, det synes jeg faktisk det var.

KL: Jeg kunne jo se at der var jo lige i starten... det stressede lidt [referer til tekniske problemer].

T: Ja, det var da irriterende den formiddag. Jeg tænkte, at det kunne da ikke passe, at jeg ikke kunne få den til at virke [griner].

KL: Men det var jo også godt at øh... jeg havde jo glemt det der med, at man kunne trykke på den store [knap]. Jeg tænkte på, at den bare gik ud om natten, så det var jo godt, du lige fik spurgt til det.

T: Ja, ja. Og det var jo også godt jeg fandt ud af, at jeg lige kunne logge mig ind og så kunne jeg starte den op igen. Fordi ellers gik den jo død [kan ikke høre hvad der bliver sagt].

KL: Men der har ikke være problemer siden med...

T: Nej. Den fungerede fint, synes jeg, så det var udmærket.

KL: Jamen det var godt at høre, Thor. Var der så noget, hvor du tænkte, at nu skal jeg lige have det her registreret. Eller var der et eller andet i løbet af ugen, hvor du sådan tænkte særligt omkring...

T: Jeg tog et billede i morges... jeg var ovre på genbrugspladsen derovre. Der var det rigtig svært at følge kommunikationen, fordi de kørte med truck, og der kom... der var en lastbil, der kom. Det generede mig lidt.

KL: det var den der, ikke [kigger på data sammen].

T: Jo der... de kører og der er det rigtig svært at følge en samtale. Det irriterer mig. Og så er der også en ting, jeg tænkte på. Det var den dag jeg var oppe på laboratoriet. Normalt når jeg er oppe på laboratoriet så slukker jeg for mine høreapparater, fordi der er så meget støj deroppe. Men jeg havde vagt, så jeg havde ikke slukket for dem. Så det generede mig sådan ind imellem. Men øh... det har jeg så vænnet mig til. De fleste gange slukker jeg det bare. Fordi normalt når jeg er oppe på laboratoriet så går jeg i min egen verden. Du skal koncentrere dig om det du gør, ikke også. Men når man har vagt skal de jo kunne få fat i én jo.

KL: Det er jo det. Det kan jeg også se, at du på et eller andet tidspunkt skriver, at du har vagt...

T: der er to ting i det. Det ene det var at min kone var af sted så jeg var alene hjemme. Så normalt så har jeg jo hende hjemme. Men det var hun jo ikke jo.

KL: Nåh som en ekstra sikkerhed. Hvis du ikke lige hører...?

T: Ja, det ligger så dybt i én. At jeg er bange for jeg ikke hører det. Så sov jeg virkelig dårligt.

KL: Og det er simpelthen fordi du er nervøs for hvis den ringer.

T: Ja, nervøs for hvis den ringer jo [kan ikke høre hvad der bliver sagt]. Nå, der er ingen opkald. Så kan man godt sove videre. Det kan godt være meget stressende. Men efter jeg har fået den her rystepude, som jeg fik sidste år, der har det hjulpet betydeligt.

KL: Nå, det var godt.

T: Ja, det har det altså. Men jeg oplevede på et tidspunkt at den svigtede. Det var da den var ny, fordi den var i stykker. Den har været defekt fra starten af. Den kunne jeg jo ikke vide, det var den første jeg havde jo.

[4.33]

KL: Altså det der med at man skal stole på teknologien, ikke også. Det kan også være lidt... indtil man finder ud af at det rent faktisk virker hver gang.

T: Ja, at den virker hver gang [griner]. Men det gør den nu så [kan ikke høre hvad der bliver sagt]. Nu har jeg den højeste og den længste ringetone på mobiltelefonen, fordi så er jeg sikker på, at så.... [griner].

KL: Du dækker dig lidt ind.

T: Jeg har det ikke godt, hvis jeg ikke...

KL: Det er noget, du har fundet ud af hen ad vejen.

T: Ja ja, det er noget man har registreret hen ad vejen. Hvad der hjælper én.

KL: Og det ligger dybt i dig.

T: Fuldstændig dybt. Og fandeme, jeg har fået den her... hov undskyld... jeg har glemt min streamer derude, og telefonen den har bare bimlet hele dagen. Så går den ikke ind... så skal jeg ind [mumler og gestikulerer]... så er det svært at høre [mumler].

KL: Øv øv.

T: ØV! [frustreret]

KL: Man bliver noget afhængig af teknik også, når man har et høretab.

T: Det gør man... det gør man. Og mit høretab det går sådan her... [laver summelyd og viser en nedadgående bevægelse]. Det går sådan her. Det kan jeg jo se hver gang jeg får nyt høreapparat.

KL: Hvor tit får du...

T: Jamen det er når der er problemer. Så ringer jeg ud til dem... sådan sådan og sådan. Jamen kom – kom forbi.

KL: Ja, så den [hørelsen] er faldet hen over årene.

T: Den er faldet ja. Jeg går jo også jævnligt til kontrol ved en speciel ørelæge for lige at tjekke, at det nu er i orden.

[praktisk snak om rekvirering af hørekurve, som Katja ønsker]

T: Det er de høje toner, der er væk. Græshopper og sådan noget – det er mange år siden, jeg har kunnet høre dem. Men jeg ligger vist sådan rimelig godt indenfor taleområdet. Rimelig godt.

KL: Især når du så er hjulpet med høreapparaterne.

T: Ja, og når jeg kigger på en. Det er utroligt så meget som det hjælper. For selvom jeg har høreapparat og går ved siden af nogen, så kan det altså godt smutte alligevel. Der er jo også alt muligt anden støj jo. Så selvom de er blevet bedre med årene høreapparaterne... væsentligt bedre... så vil jeg altså stadigvæk gerne se på folk. Og det er irriterende fx hvis jeg ser fjernsyn, så kan man se med det samme [laver høj lyd]... det passer ikke. Med tekst, der bevæger sig [?] Jeg kan se teksten... det bevæger sig ikke. Så siger konen "Jo [kan ikke høre, hvad der bliver sagt].

[9.07]

KL: Du bruger måske også det visuelle meget.

T: Det hjælper i hvert fald væsentligt. Det gør det. Nogle gange, når jeg er gået i seng og konen gerne lige vil fortælle mig et eller andet, så "hvad siger du?". Så nogle gange står jeg op og tager høreapparat på, fordi, når hun gerne vil fortælle et eller andet, fordi [laver opgivende lyd].

KL: ja, det er for svært at...

T: Ja, det er svært, og hun bliver jo også træt af det ikke også og siger sådan "åh" [laver opgivende/irriteret lyd].

KL: Jamen det er da hårdt både at have et høretab og også være den der er gift med en der har et høretab. Der er da mange ting i det for jer begge to. Men hvordan er der ellers noget, du tænker, du har lyst til at snakke om.



T: Nej... jeg tænker nok at jeg er nok mere følsom overfor uvedkommende støj... altså den daglige... end jeg egentlig tænker over. Jeg kan ikke ret godt høre al mulig musik og sådan, hvis jeg skal føre en samtale og snakke med nogen. Det generer mig egentlig mere end jeg sådan lige tænkte over.

KL: Okay, så det er du blevet lidt mere opmærksom på

T: Det er jeg blevet mere opmærksom på ja. Det dur ikke for mig. Det kan være det gør for andre men det dur ikke for mig. Baggrundsstøj, hvis jeg skal konversere med nogen.

KL: Bare det at blive bevidst om det kan jo gøre at man så kan få en aftale med kolleger og sådan noget.

T: Ja, sluk den lige... det er noget af det, jeg har opdaget.

KL: Så du veksler lidt mellem laboratoriet og udenfor?

T: Ja, laboratoriet der er jeg en gang imellem om formiddagen. Så jeg er meget ude. Jeg vil sige i sidste uge var lidt atypisk, for der var efterårsferie, så jeg var meget alene i sidste uge og jeg faredede rundt her og der og alle vegne. Så den var lidt atypisk på den facon. Men ellers er jeg meget ude og så er jeg meget den, man kommer og spørger til råds. Jeg har været her i snart 25 år, så jeg har en anden viden, end den du kan købe dig til: "hvordan fan' er det nu lige det er...?"

KL: Så du har meget kommunikation også.

T: Jeg har meget kommunikation ja. Vi har lige været til sådan en team-rolle... Jeg har fundet ud af at jeg er rigtig god til at formidle og holde sammen på tingene. Heh, så den var meget godt [griner højt].

KL: Det er da dejligt. En stærk ressource, som man også skal passe på jo! Og du skal passe på dig selv.

T: Det skal man passe på jo. Det har jeg også fået at vide nogle gange, fordi der har været et par gange, hvor jeg var ved at gå ned med stress, fordi så var der lidt for meget af det ene og det andet. Så siger chefen også at nu må du lige tage dig sammen, fordi vi vil gerne beholde dig indtil du er 65. Jeg har sagt, at jeg vil gerne arbejde, indtil jeg er 65. Jeg ved godt at man med den alder man har kan risikere... men som udgangspunkt. Og det er min ledelse også bevidst om.

KL: Men du har været henne og snakke med dem nogle gange.

T: Jo, når de har registreret... så ”vi må hellere lige have en samtale med Clausen” [griner højt]. Det er fint nok.

KL: Så I har en god kommunikation?

T: Vi har en god kommunikation. Det har vi.

KL: Det er en vigtig ting. At der bliver sat pris på det man laver.

[vender opmærksomheden mod data]

KL: Ja, så fik du den stoppet der om aftenen.

T: Ja, så vågnede jeg på et tidspunkt, og så var jeg træt og så tænkte jeg, at så kunne jeg ligeså godt fortælle hvordan jeg har det [griner]

[13.00]

T: Når man nu er vågen alligevel.

KL: Så føler du dig lidt stresset... det er her om morgenen [refererer til data].

T: Ja, jeg føler mig lidt stresset... så er der det ene og så er der det andet. Der var mange ting i vejen. Jeg havde sovet rigtig dårligt. Jeg var i rigtig dårligt humør og jeg var træt og der "argh" [udstøder en høj irriteret lyd].

KL: Der var energiniveauet nede og humøret var nede og...

T: Det jeg sådan tænker, det er, at jeg synes, det var svært at vurdere: "jamen hvordan er dit humør egentlig? Er du sprudlende glad eller lidt irriteret eller træls eller lidt ked af det eller hvad?" Det synes jeg er svært at vurdere ind imellem. Det er rigtig svært. Der skulle jeg virkelig...

KL: Men måske meget godt at prøve at mærke?

T: Det er rigtigt: prøve lige at mærke dig selv.

KL: Og blive opmærksom på hvordan er det lige nu i forhold til lige før. Men så kan man også se at humøret alligevel kom op her om formiddagen – også selvom der er noget støj.

T: Så skal man lige i gang med noget. Generelt så tror jeg egentlig at jeg er i sådan rimelig godt humør. Generelt!

KL: og det man kan sige... altså det ligger generelt med god energi og godt humør osv... der har du sovet dårligt igen. Det er så den 17. Oktober. Det er der hvor... ja, det er den jeg læste, hvor du var bange for ikke at høre alarmen, hvor du nok var alene hjemme.

T: ja, for jeg vågner jo fandeme hele tiden – det er rigtig træls. Du bliver rigtig...

KL: Var det der hvor den brummede?

T: Nej jeg vågnede jo alligevel og så tænkte jeg at jeg kunne ligeså godt... [griner]

KL: Jamen det er også bare super godt.

T: Altså jeg kunne ikke høre den brummede jo [15.13]. Det kunne jeg ikke.

KL: Nej, men det er jo rigtig interessant ligesom at have den der nat, for det er faktisk sjældent, at man får nogle besvarelser med om natten. Hvordan er humøret, når man vågner og er så træt og egentlig ikke sover ordentligt.

T: Ja, det er noget lort.

KL: Og kan man så måske se noget om hvordan... altså det har ikke umiddelbart påvirket dit energiniveau om dagen, men det kan være du alligevel har fundet noget energi frem og noget godt humør...

T: Nåh jamen så møder man jo også nogle gode kolleger og så bliver man jo nogle gange i godt humør, og siger åh nu... [mumler]

KL: der er jo også en sammenhæng der. Man kan sige, at det der med at der er noget, som kan være svært ved både at have et høretab og skulle være på arbejde og klare en masse opgaver. Men så er der den modvægt, der hedder kolleger og godt arbejdsmiljø og det der med at det giver noget energi til en. At det så måske opvejer. Og så når det ikke er hver nat du sover dårligt. Havde det nu været hver nat så havde det...

T: Så havde det ikke været rigtig godt. Jamen det er gode kolleger, vi har generelt. Og så kan de godt lave lidt fis. Og så nogle gange kan jeg godt høre de står og snakker bagved [mumler] bare for sjov [griner]. Så det er såmænd meget fint.

KL: Og de ved jo alle sammen, at du har høreapparater.

T: Ja, det ved de alle sammen.

KL: Og du går jo også rundt med din... [peger på FM-system]. Og I har snakket om det. Og det er jo godt, at man kan lave lidt sjov, og du ved at det er godmodig humor.

T: Ja, når det er godmodig humor, så er det jo sjovt nok. De har også brokket sig. Når jeg har min streamer med så kan jeg jo godt høre. Så siger jeg "Hva"? Hvad siger I? Prøv lige en gang til" [griner].

KL: Så griner de lidt måske [griner].

T: Eller også så siger de "Glem det, vi kommer i morgen" [griner]. Det fungerer faktisk skide godt.

KL: Jeg tænker også, at du er en person, der er positiv at natur og ikke er den der der opfatter det som noget negativt at der er nogle, der laver lidt sjovt. At det nærmere er noget rart og venligt.

T: Ja, det er hyggeligt. Og hvad skal man kalde det? Godmodigt mobberi. Det er jo det der gør det lidt sjovt, ikke. Jeg kan jo også godt give igen jo.

KL: Ja ja, det er jo det, hvis man så kan give lidt igen, så er der ligevægt.

T: der er ligevægt ja [forstår ikke resten af sætningen – der grines højt]

KL: skal vi prøve at sætte den der [HRV-måleren] i? Så kan vi se hvordan hjerterytmen har været.

[18.42]

[snak og rumsteren i forbindelse med tilslutning]

KL: Er det gået fint nok med at oplade den?

T: Ja, jeg har bare sat den i. Så har den lyst orange, og når den så er holdt op med det, så må det være fordi... [den er ladet op]... det går jeg ud fra.

[rumsteren – bruger tid på at starte HRV-data op]

KL: Nu skal jeg lige se, om jeg kan få den til at registrere det... Der kommer den. Det er sådan med sådan noget... det skal man lige være lidt tålmodig med nogle gange. Jeg tænkte på, om der er nogle bestemte tidspunkter, du gerne vil ind og se på? Der hvor du har sovet dårligt eller er der et tidspunkt, hvor du har tænkt, at det kunne du godt tænke dig lige at se, hvordan din krop har reageret? [rumsteren] Jeg prøver lige igen... Kan jeg komme på nettet her?

T: Jeg har da en adgangskode her.

KL: Ja, så skal du bare lukke det igen bagefter. Så bare tjekke den der af, så den ikke husker... Så hvis du bare logger på en enkelt gang.

KL: der er i hvert fald registreret nogle målinger... nå, det vil den ikke [snak om at komme på nettet og få adgang til profilen. Men vi kan også gå op, hvis vi kan komme på nettet deroppe?

[rumsteren]

T: Sådan jeg kan komme på nettet her [ved den anden computer].

KL: så skal vi lige – jeg tror det er den her adresse[rumsterer]. Så kom den der. Så tager vi bare lige den anden [computer] med herover.

[rumsterer]

[26.50]

KL: Vi skal næsten lige finde nogle tidspunkter her, som du kunne være interesseret i at se. Jeg skal lige have denne her med [optageren].

T: Jamen så kunne det jo være der, hvor jeg ikke kunne sove.

KL: det er der kl. 00.10 15. Oktober. Hov, der kan man se at det er bare lige en kort periode – det er bare 9 sekunder [hvor der ikke har været forbindelse til HRV-måleren]. 00.10... Ja, der er jo et eller andet lige der omkring. Kan det passe at du måske... Se det her er variationen, dvs. Hvor meget varierer tiden imellem dine hjerteslag. Hvis der er god variation, så er du dejligt afslappet, og hvis den begynder at flade lidt mere ud og blive mere jævn, så er det fordi du er i gang med et eller andet fysisk eller det kan være at din krop er i en stresstilstand.



T: Okay.

KL: Men det kan man rent faktisk se her... vi kan lige prøve at gå ind og kigge... her ser den sådan... det ser ud som om du har ligget og prøvet at falde i søvn.

T: Jamen det har jeg sgu da også [irriteret over tanken om, at han havde svært ved at sove].

KL: Du har ligget helt stille og sådan... kan du huske hvornår du gik i seng?

T: Jamen jeg læste ansøgninger og gik i seng ret hurtigt efter det. Halv elleve.

KL: Ved 10.30-tiden. Jamen det passer meget godt. Se her er du oppe sikkert, eller... kan det passe... det er 11.30 det her.

T: det kan godt være at klokken er blevet så mange, før jeg kom i seng – jeg sad jo og læste ansøgninger.

KL: Du sad og læste ansøgninger, ja. Så har du lavet en besvarelse kl. 11.18. Så er du måske på vej i seng. Det passer meget godt her at du lige har lavet en besvarelse her omkring ikke?

T: Heromkring, jo.

KL: og så har du tulleret lidt rundt og så øh... så ser det ud som om at du egentlig har slappet rigtig godt af lige her... der er sådan rigtig meget variation, og det er tegn på at du slapper rigtig meget af. Det er måske der hvor du lige kommer i seng.

T: Okay.

KL: Hvordan er det når du ikke kan sove? Ligger du og tænker? Bliver du lidt stresset over det?

T: Ja, nogle gange gør jeg, fordi jeg ikke... fordi jeg ved jo godt, at jeg hader at være træt om morgenen.

KL: Ja, det er jo det.

T: Jeg hader at være træt om morgenen, det er noget af det værste jeg ved. Og det er irriterende, og så kommer man ind i tankegangen og så går det først rigtig galt. Og så skal jeg jo passe på at jeg ikke falder for godt i søvn, for jeg skal jo også høre telefonen. Der er mange ting at holde øje med jo.

KL: Ja, det ser jo ud som om du er gået i seng med en forventning om, at nu skal du sove.

T: Nu skal jeg sove ja. Normalt går jeg i seng og så falder jeg i søvn. Bum siger det, og så lægger jeg mig til at sove... nu skal jeg sove jo.

KL: Og sådan ser det nemlig ud. Og så er det som om at den går hen og bliver lidt mere jævn, som om at du ligger sådan... som om at du kan mærke, at du ikke kan sove.

T: Ja, der kan jeg ikke sove ja.

KL: Og så ligger du faktisk en halv time mere der. Nu skal jeg lige havde den tilbage her [snakker om data]... se hvordan er det nu, jeg gør det...? Her... ja, så er det som om at øh... lige her omkring, så kan man faktisk lidt se at der er noget bevægelse, men det er ikke ret meget mere end det. Men gad vide hvornår du så faldt i søvn.

T: Ja, det ved jeg ikke.

KL: skal vi prøve at se om vi kan se det?

T: Ja.

KL: Så sker der noget herhenne omkring 12.40.

T: Okay [nysgerrigt]

KL: at du måske begynder at falde i søvn. Kan det ikke godt passe?

T: Jo jo.

KL: så svinger den [HRV] lidt mere. Det er skiftevis en REM-søvn og en dyb søvn. Det kunne se ud som om at du har sovet lidt let her til at starte med. Måske har du egentlig ikke sovet så godt.

T: nej jeg har sovet elendigt.

KL: fordi det der med lige at nå den der dybe søvn... det ser ikke ud som om du rigtigt når den. Det ser ud som om at du sover sådan ok her hen omkring 1.30. Kan du huske om du vågnede mange gange?

T: Ja, det har jeg en klar fornemmelse af at jeg gjorde. Så vågner jeg og så skal jeg lige tjekke telefonen og så lægger jeg mig til at sove igen.

KL: Ja, nemlig. Så er du oppe igen der ved 5-tiden. Skal vi prøve at se om vi kan finde den?

T: Ja.

KL: Se der ser det også ud som om du egentlig sover ok. Og så vågner du derhenne... her står du i hvert fald op, kan man se. Så er der sådan kroppen. Så komme den [HRV] sådan lidt mere ned og bliver lidt mere jævn her.

T: Ja, der var jeg vågen fordi jeg ikke kunne sove. Og så tænkte jeg at jeg lige kunne fortælle, hvordan jeg havde det.

KL: Lige præcis, og det kan man se... det er ret præcist at det er lige der omkring at du står op og...

T: Ja, så tænker jeg at jeg skal lige have en times søvn mere. Jeg står ikke op kl. 5 – jeg står først op kl. 6.

KL: Ja ja. Så er du oppe kl 6. Ja, og så ligger du igen her.

T: Ja, der er jeg lige faldet i søvn. Det er jo ikke så farligt at falde i søvn hen ad morgenstunden.

KL: Nej det er dejligt, når man lige kan lægge sig en ekstra time. Så kan man se at der sker lidt... der er du lidt aktiv, der går du nok rundt og laver lidt.

T: Jamen jeg skulle jo have noget morgenmad og jeg skulle op og ned ad trappen og jeg skulle nå det hele.

KL: Ja, ja.

T: Og være klar til at jeg skulle på arbejde jo.

KL: Alle de der ting, man nu skal.

T: Alt det der [griner].

KL: Nå, skal vi... se der, det er jo så kl. 8, hvor du egentlig føler dig stresset. Skal vi prøve at tage den lige og kigge på?

T: Ja, ja.

KL: Så har vi kl. 8... så skal vi næsten have en eller anden reference... Du har nok følt dig stresset i lidt tid. Eller hvad? Er du lige mødt?

T: Ej, jeg møder kl. 7.

KL: Du møder kl. 7 ja.

T: [mumler uforståeligt]

KL: Hvordan kommer du til arbejdet? Er det med bil?

T: Ja, det er med bil, ja. 20-25 minutter fra jeg kører hjemmefra.

KL: Så sidder du i bilen ja, og så er du lige ankommet her ikke. Så er der lidt aktivitet. Så kommer du ind her.

T: Ja, så kommer jeg ind der ja.

KL: Hov [griner]... så går vi ind der... og det er jo rigtig svært at se på den her [HRV]... det er jo også mere for at man får sådan en fornemmelse af at , der er en sammenhæng mellem krop og det man oplever. Jeg ved ikke hvordan det var at have den på og om du tænkte over at du...

T: Nej ikke sådan.

KL: Ikke sådan, det var godt.

T: Jeg var kun bange for at jeg kom til at hive den af... ellers har jeg ikke...

KL: Nej, du har ikke lagt mærke til den på den måde.

T: Der var lige en dag hvor jeg var på vej i bruseren så [laver lyd, gestikulerer og griner, for at vise, at han var ved at glemme at tage den af]. Panik!

[begge griner]

KL: Men altså man kan ikke som sådan decideret se, at du føler dig stresset på den måde. Det som man kan se, er hvis du fx er i en rigtig stressende situation, hvor man fx skal præstere eller gøre noget som man ikke følte sig klar til, eller hvor man sådan er i nogle af de der yderbelastningspunkter, hvor man måske ville kunne se på kroppen, at uh, nu hamrer hjertet, eller nu... eller hvis man er i et skænderi med en eller et eller andet.

T: Nej, det er ikke noget, jeg bruger tid på [griner].

KL: Nej, det er jo det. Og så tænker jeg også, at det er måske ikke sådan. Det var mere, hvis der var noget, du gerne ville se på.

T: [siger noget uforståeligt] ...det ville den ikke optage.

KL: Det ville den ikke optage?

T: Nej, der står godt nok... gem. Men der står fejl stort set hver gang.

KL: Ja, det gør der. Jeg har simpelthen ikke kunnet afspille dem. Men jeg kan lige prøve at spørge drengene der, der har lavet dem.

T: [siger noget uforståeligt]

KL: Ja, det hele kører der. Jeg skal lige se, om den her stadig kører [optageren].

T: Og så kunne jeg egentlig godt tænke mig lige at finde ud af her... jeg står og laver nogle ting, som i min verden er fuldstændig spild af tid.

KL: Ok og der er du også...

T: [uforståeligt]

KL: Ok, det er fra 12... 11? 11-12 stykker?



T: Ja, 11 – 12. Det stresser at få den der... [uforståeligt]. Jeg arbejder på at få den der... Vi starter faktisk her fra fra fra... vi kører ud fra... jeg er på laboratoriet fra kl. 9 af [uforståeligt].

KL: Øh, jeg skal lige have en reference dertil. Er du der også før kl. 11 der? Er du der også fra morgenstunden? Der viser det jo [log-data] faktisk, at du synes, at det giver ingen mening det her.

T: Det er rent molbo-arbejde, rent molbo-arbejde.

KL: Og det er jo træls at bruge sin tid på.

T: det er rigtig træls at bruge sin tid på. Fordi jeg har møg-travlt.

KL: Ja, det er jo det. Så kan det stresse i sig selv, at der er noget... man synes, man ikke får lavet.

T: Det er irriterende ikke også. Og så er der larm i baggrunden. Men om det påvirker mig, det ved jeg ikke som sådan.

KL: Du siger fra kl 9 ca.

T: ja, lige sådan ca.

KL: Jeg ser lige om der er forskel fra før. Møder du først på arbejde der? Eller er du i gang med noget andet?

T: Nej, jeg møder her kl 7.

KL: Ok, der mødte du også kl. 7.

T: Og så skal vi ud og samle prøverne ind. Vi har sådan nogle prøver og jeg sidder oppe på laboratoriet ved en 9-tiden eller kvart over 9. Det er lidt forskelligt hvad der er af problemer. Og så får vi samlet sammen. Så sådan er det.

KL: Så du møder her omkring jo. Og så... så er du i gang. Man kan se at du bevæger dig lidt rundt.

T: der er jeg ude at køre bil i hvert fald.

KL: Det er kl 8.48. Så kører du bil og så sidder du også og slapper af i bilen der.

T: Ja, ja.

KL: Så er du på laboratoriet der. Sidder du ned og arbejder, eller...?

T: Nej, vi går frem og tilbage [uforståeligt].

[42.00]

KL: Fordi man kan ikke se nogen videre... det er mere den der stress, hvor man bliver lidt irriteret... det kan jeg ikke rigtigt se. Jeg kan ikke rigtig se det modsat, eller hvad skal man sige... Det er nærmere den her [log-data] der giver os et hint om at det er lidt meningsløst. Men kroppen på den måde reagerer ikke voldsomt på det. Men det betyder ikke, at den ikke er påvirket af det.

T: Nej, ok.

KL: At du måske føler dig lidt i en stresstilstand, fordi du laver noget, som du ...

T: jeg føler mig irriteret i hvert fald.

KL: Ja, en irriteret tilstand, der kan gøre at man alligevel føler et eller andet inde i kroppen, men det belaster ikke hjertet på den måde, tænker jeg.

KL: Jeg kunne godt tænke mig at finde et sted, hvor du sådan virkelig slapper af og... Der er du inde og spise frokost, eller hvad?

T: Ja, det gør vi ved 12-tiden som regel.

KL: Der kan man godt se, at den ændrer sig lidt her. Er det fint nok? Der er ikke for meget larm?

T: Nej det er fint nok. Men der er jeg alene, for der var ikke nogen. Så kunne jeg sidde og slappe af. Når jeg er alene, så kan jeg godt finde på at sidde og slappe af med benene op på en stol.

KL: Åh hvor dejligt. Det er dejligt.

KL Det kan være vi kan finde en aften, hvor du slapper af. Der er en aften her: ser tv, er alene hjemme... skal vi prøve at se hvordan du...?

T: Ja, jeg var alene hjemme og sad stille og roligt og slappede af.

KL: ja, det er jo bare... jeg ved ikke om du også sidder og ser fjernsyn der? Så slukker den derefter. Så sidder du bare og slapper af her. Det ser... ja... nu skal vi lige se her. Ja, der er ikke så meget at se... hvilket jo er godt [begge griner]. Så længe der ikke er nogen vilde udslag, så er det jo godt nok. Hvad med der hvor du har været ude til sådan et alarm-kald? Hvordan er det når du bliver kaldt ud til de der alarm...?

T: Altså du får jo en sms eller bliver ringet op. Så lukker jeg vores computeren op og kigger og ser... nogle gange... en del gange, kan det klares via computeren.

KL: Ok, hvad er det for en type ting, I skal ud til?

T: Det kan være alt muligt. Det kan være en pumpe, der er i stoppet, det kan være en computer, der er gået ned, det kan være kommunikations [uforståeligt]. Men det er alt sammen noget der er vitalt for... vi har en masse alarmer, der kan vente. Men vi har nogle, der er vigtige for selve driften af rensningsanlæg eller pumpestationer. Den dag der var det rensningsanlægget der lige var sat ud. Så måtte jeg køre over og... Jeg vidste godt, at jeg bare skulle op og trykke på knappen. Det værste jeg forestillede mig var at det blev ved. Så er det knap så sjovt. Og man ikke lige ved hvad...

KL: har du prøvet det?

T: Ja, ja! Jeg har prøvet og stå der og sige ”hvad fan’ gør vi nu?”.

KL: så det er ikke sådan, at du bliver nervøs, når du skal ud til det.

T: neeej, ahhh, det kan godt. Dengang vi lige fik nyt transportsystem, der vidste vi jo knap nok hvordan det... så kan man godt se... øh, hvad gør vi nu her?

KL: Ja, man står jo alligevel med et ansvar, når man bliver kaldt ud.

T: men så kan man jo ringe til en ven.

KL: Ja, det er godt, man kan ringe til en ven [griner].

T: Og de ved godt, at den her har jeg altid på mig [telefonen].

KL: Kan du egentlig huske, hvad det var du ville optage her [optagelsen kan ikke afspilles]. Og det er mærkeligt, den har heller ikke taget lokationen.

T: Der var jeg hjemme og ordne brænde.

KL: det ser rigtig hyggeligt ud.

T: Det var rigtig hyggeligt.

KL: Hvem var det sammen med? Det er min kone og min ældste søster og vore plejebarn.

KL:

Nå, I har et plejebarn også.

T: Ja, vi har faktisk to. Og så har vi nogle i aflastning også. Det var vældig hyggeligt. Det der er min kone og det er min ældste søster. Det der er Ollie, der har været hos os i tre år. Han er evnesvag, men han er rigtig glad og mangler en far. Så... [antyder, at det er han blevet for Ollie]

KL: Nå så er du lidt... hvor er det godt Thor. Det er simpelthen dejligt.

T: Ja!

KL: Man kan godt se det lidt at det er din søster, kan man ikke det?

T: [griner] jo, det kan man godt. Hvis du ser hende, så er du slet ikke i tvivl om at det er min søster.

KL: Dejligt, det er hjemme hos jer?

T: Hun er seks år ældre end mig.

KL: I ser altså unge ud i jeres familie [begge griner]. Men hvis der ikke er andet, du synes vi skal ind og kigge på, så synes jeg vi skal lade det være. Og så tænker jeg hvis du har et eller andet.

T: Jamen det har været vældig spændende. Det synes jeg har været rigtig godt. At skulle tage stilling til, hvordan har du det? Føler du egentlig du har mentalt overskud? Føler du egentlig det. Det synes jeg var rigtig godt. Det er lige før, jeg kommer til at savne det [griner].

[51.00: Afslutter]

## Dialogue – C (normal hearing person) and Eva, February 2013

*C. is normal hearing and B. Is hearing-impaired*

KL

... og jeg tænker at vi bare sidder og snakker sammen alle tre – var der noget I kom til at tænke over eller om der er noget I har lagt mærke til omkring vaner osv. i løbet af den uge? Kom I til at tænke over et eller andet?

C

Jeg tænkte meget over det der, det var sådan ligesom at jeg skulle gå og tænke over, hvad det var jeg gjorde anderledes eller et eller andet... det syntes jeg slet ikke... altså hvordan kan du få noget ud af det? For jeg tror også at man er i en rutine i løbet af sådan en uge der, hvor man laver det samme og det samme og det samme... som regel. Hvad kan man få ud af det?

E

Det var mest den første dag, der tænkte man meget over at man gik med den der på, ikke, men så glemmer man det egentlig.

C

Ja, så er man inde i rytmen: nå men nu skal du huske at have den der på, og nu skal du huske at... og så får man sådan en rytme med at nu står du op og så får du den der... ja, nu duede den så ikke, men jeg fik den i hvert fald på og af og alt det der, og så skulle man til træning og skulle man ditten og datten... Jeg kunne så ikke have den med derind, så det var derfor jeg skrev: "...jeg har været til træning", og sådan noget.

KL: Jeg kunne i hvert fald se, at du havde noget træning der om tirsdagen, kan det ikke passe?



C: Ja, efter arbejde, jo det kan godt passe.

KL: Du starter sådan lige 18.12, ikke?

C: Ja, der står jeg på rulleskøjter.

KL: Det kan man faktisk se her når den flader ud. Nu har jeg bare lige taget et screenshot (viser hende) af en lille del af dine målinger, ikke.

C: Men det var jo så også den eneste dag den duede.

KL: Ja, jeg har jo masser af målinger, men jeg ved ikke hvad tid på dagen det er, og så kan jeg jo ikke rigtigt bruge det til noget.

C: Ja, jeg sov endda med den en nat, hvor jeg vågnede og kunne se, at der ikke var lys i den, så jeg kunne jo se, at den ikke duede. Men det kunne jeg så i løbet af mange af dagene – når jeg så havde ladet den op, så duede den, og så tog jeg den på og så blinkede den jo, men kun til omkring kl. 15 eller 16. Så tænker man ikke over det, og så kommer man hjem, og så dur den ikke igen.

KL: Men det virkede i hvert fald den første dag, og jeg kunne se, at der egentlig også var fine målinger på - tidspunkterne passede bare ikke.

C: Nå det var simpelthen tidspunkterne, den ikke kunne finde ud af?

KL: Ja.

*(snak om den defekte HRV-måler)*

KL: ...men så lige inden vi går ind og kigger på de grafer, jeg har lavet, og inden vi går ind og kigger på dine hjerterytmemålinger, Eva, så skal jeg lige høre, om der er nogle af jer, der har følt jer stressede på noget tidspunkt i løbet af den uge, hvor I havde det på?

C: Ja, kun med den der *(peger på mobiltelefonen)*

KL: På grund af den?

C: Ja, fx hvis du er ude at handle, så begynder den at bimle helt vildt, man kan blive sådan helt "...åh nej", det er ligesom sådan en sms, der kører i gang hele tiden. Altså, jeg synes det var meget belastende faktisk. Jeg synes det var for tit med en gang i timen. Til sidst... jeg havde faktisk ikke opdaget at det var det samme tidspunkt, den gjorde det på, før Eva gjorde mig opmærksom på det. Gud, er det samme tidspunkt. Så begyndte jeg... så, nu kommer den snart, nu begynder den snart, og så gør jeg det på forhånd, og så kommer den alligevel.

KL: Ja, det ville jeg også sige til dig, for jeg kan se, at den er kommet hver halve time nogle gange, og det er jo simpelthen fordi, at du har villet svare på forhånd. Men den tager jeg med til udviklerne – det må kunne laves sådan, at der så går en time fra at man har besvaret. For jeg kan også se, at der er nogle dage, hvor du har rigtig mange besvarelser (alle griner) ...og der er en dag, hvor du har ekstremt mange – det er nok fredag – der er bare rigtig mange besvarelser.

C: Det var nok den dag, jeg var ude at handle – det var virkelig irriterende. Og hvor jeg var i butikker og sådan noget. Se her hvor mange gange (tæller)

C: Jamen det er da også helt vildt, det kan jeg slet ikke forstå.

E: Det kan jeg godt forstå at du bliver stresset over.

C: Ja, jeg blev faktisk stresset over det.

E: Min var en gang i timen, men det var ligesom at den forhalede det lidt der til sidst.

C: Ja, det synes jeg ikke min den gjorde.

KL: Det er jo 18 gange – det er rigtig mange gange. Og det er simpelthen fordi at vi skal have lavet det om. Det beklager jeg. Det er i hvert fald en rettelse, vi skal have med.

C: (*griner*) det var faktisk det jeg tænkte mest over: ”det var da godt nok stressende”

E: Jeg kunne heller ikke forstå at du blev så stresset af det – jo, jeg syntes det var lidt belastende ind imellem, men ikke så meget som dig. Men det kan jeg da godt forstå.

C: Ja, jeg gjorde det jo tit sådan på forkant, så den ikke skulle brumme, når jeg sad i bilen, men det gjorde den jo så alligevel.

KL: Ja, jeg kan se, at du ( ) besvarede faktisk ret præcist en gang i timen.

E: Ja, det lå ligesom i baghovedet: nu er den snart 20 min over, og så skal du hen og trykke på den der.

KL: Men har det gjort noget i forhold til at I har tænkt over det der med lidt mere objektivt at betragte sine følelser eller hvad sker der i mig lige nu? Hvordan har jeg det lige nu? Hvor man sådan til daglig bare er i det.

E: Joh... jeg synes egentlig... vi var på et kursus på et eller andet tidspunkt, og der kunne jeg godt mærke, at der var jeg ikke i det bedste humør. Der blev jeg sådan lidt mere stresset osv. og det er jo fordi jeg er vant til det der: kan man høre hvad de siger, når man kommer på det kursus eller er det helt lost at gå på det kursus? Det oplever jeg jo engang imellem, at man ligeså godt kunne være blevet hjemme. Så jeg tror nok at jeg gejler mig selv lidt op, når jeg skal på sådan et kursus der.

KL: Hvornår var det? Var det fredag? Der har du skrevet, at du var på kursus om formiddagen.

E: Hvad var det det var for et kursus?

C: Det var det der IT-noget der.

KL: Det var om formiddagen.

E: Ja det var hele formiddagen stort set.

C: Ja, det var så, det var fra morgenstunden af. Det var også den dag... jeg syntes simpelthen ikke at jeg lavede andet end at besvare. Men jeg synes nu ikke at det var hver gang at jeg selv fik den til at gøre det. For nogle gange, når jeg var klar, så ville den ikke. Den hoppede jo tit ud. Altså der var meget meget dårlig forbindelse. Og på et tidspunkt måtte jeg genstarte hele telefonen. Der tænkte jeg, at nu er hele lortet nok væk. Det gjorde jeg tre gange tror jeg. Det fandt jeg ud af, at det skete der ikke noget ved. Så genstartede jeg. Den frøs simpelthen så meget.

KL: Der er simpelthen et udvikler-problem.

C: Det er en programmeringsfejl (griner). Men den var meget sløv til at reagere.

KL: Der er også det, at det er en Samsung, og den er ikke så god i skærmen som fx en iPhone, hvis man er vant til en iPhone. Det er du, ikke også Eva? Og der kan man godt mærke forskel.

E: Ja, meget. Nogle gange skulle jeg trykke og trykke og trykke. Og der skete bare ikke noget.

C: Ja den frøs. Jeg har jo en HTC-telefon, og jeg synes ikke der var forskel, men den var simpelthen så sløv, og så frøs den bare. og så forsvandt billedet.

E: Ja, jeg genstartede den nok en tre gange, tror jeg, hvor den bare ikke ville noget.

C: Altså selve app'en kører i hvert fald ikke fantastisk. Det var mere sådan noget, der stressede mig: fuck, nu vil den ikke det jeg vil, og det var sådan at nu skal det lige gøres nu, for nu passer det ikke lige de næste timer. jeg begyndte jo også at regne frem... der er jeg ude at køre og der er jeg inde i fitness centret. og så kan jeg lige gøre det på forhånd, og så holder den vel op. Jeg var ikke klar over, at den så alligevel gjorde det.

KL: Det var jeg faktisk heller ikke, jeg troede faktisk at den så ville vente en time. men det kunne jeg se på dine besvarelser, når der kun gik en halv time, og jeg tænkte aarrh... nu er hun lidt ivrig med at svare.

(griner)

C: Ja, jeg blev lettere ophidset over den der (griner)

E: Men også det at den skulle stoppe om aftenen på et tidspunkt, det gjorde den jo heller ikke, der fortsatte den om natten.

C: Ja, det var der hvor den lå og kørte ned ad bordet derhjemme ved mig jo. Det var derfor at ledningen gik i stykker – der havde jeg den jo i oplader. Så er den jo hoppet ned ad bordet, når den ligger og bzzz bzzz bzzz... Så var den jo røget ned på gulvet. Det gjorde den to gange.

KL: Den stoppede ikke om natten?

E: Mm, det tror jeg ikke, fordi jeg havde gjort det sidste gang 22.20 en dag. Jeg lagde den bare ude i køkkenet.

C: Ja, jeg lukkede døren derud til. Men man kunne altså se, når den var faldet ned... det sker jo ikke af sig selv, vel. Så den ligger jo derude og brummer sig selv ned.

E: Men den var da klar 6.20 igen, så jeg ved ikke om den har været slukket eller slået fra på et tidspunkt.

KL: Nej, men det skal jeg i hvert lige have snakket med dem om, hvordan vi lige kommer omkring det der. For på den ene side skal man jo have lov til selv at bestemme. Og på den anden side skal man også mindes på, at man skal svare. Så det er lidt et dilemma, vi må lige have snakket sammen med udviklerne om, hvordan vi klarer den. Men det blev I lige udsat for.

C: Jamen det er jo godt nok at være testpersoner (*griner*), der var da i hvert fald så mange udfordringer, at der var da lidt at tage fat i i hvert fald. Det var ikke bare sådan: jamen det var da hyggeligt nok (*griner*). Det var egentlig ikke et problem, når man var på arbejde, så ved man, at så begynder den snart at blop blop, så ved man at så kan begynde at... det var sådan mere i fritiden, synes jeg. Og så om aftenen var det heller ikke noget problem, synes jeg. Så sidder man måske alligevel og ser fjernsyn, så kommer den igen med det bib bib der.

KL: Ja, det er der når man er ude og har gang i nogle ting og ude at handle og sådan noget. Og måske er det heller ikke så tvingende nødvendigt at man svarer en gang i timen, når man har travlt, men så er der alligevel den der med...

C: Jamen det er jo ikke sådan at den stopper efter at have brummet tre gange, så bliver den ved! (*griner*)

E: Det er også sådan, at hvis man laver det samme i flere timer, fx sidder og slapper af, ser fjernsyn, så kan man jo kun trykke de samme ting ind. Så siger det jo ikke så meget.

C: Og det var også der til sidst, vi begyndte at skrive noget, for ellers synes vi jo bare at det måtte blive det samme... the same old same old same old thing.

E: Det gjorde jeg også fra dag to eller tre, tror jeg.

KL: Men noget af det, vi i hvert fald kan konkludere, er at Eva, du bliver lidt småpåvirket op til et kursus, fordi du lige bliver lidt nervøs for, om du kan klare det. Det kan i hvert fald påvirke noget.

E: Ja, det kan det.

KL: Og så tænker jeg, at sådan noget som jeres rutiner... I er måske også et sted i jeres liv, hvor I har nogle rutiner, som har kørt rigtig fint i lang tid. Det der med hvordan ens liv ellers hænger sammen... I er jo ikke nye i jeres jobs, I har ikke lige stiftet familie, der er ikke lige sket de store omvæltninger, der gør at jeres rutiner er usikre. I er rimelig sikre på at I har en rutine.

C: Det var også derfor det var lidt det samme og det samme der skete bortset lige fra de dage, hvor man skulle noget andet. Men rutinen er jo lidt den samme på en almindelig dag.

*Optagelse slutter*



## Marianne – dialogue June 2014.

### Notes from video:

- Teknik – kan du se hvor mange gange den er gået ned?
- Træthed
- Nysgerrig på HRV
- Svingende besvarelser med app
- Træt af den
- Den er svær
- Synes ikke der er store udsving
- Ked af det dagen før
- Det bliver lidt det samme i besvarelserne
- Det blev for højt niveau fra starten, så det blev svært at lave foreksellige
- Lokation ikke stabil
- Sidste opdatering ”ret dårlig”
- Usystematisk hvornår den går ned
- Besvarelserne komme ikke hver time
- Energi – hvornår på dagen er den lav?
- Pause når hun kommer hjem
- Drak te – efter var hun træt
- Træthed kommer efter, man er på
- Man ’opper sig’
- Man har som regel ikke mulighed for at trække sig ud af situationer, der kan være trættende
- Kommunikation trættende
- Overvejer at møde lidt tidligere, fordi hun bliver træt efter frokost
- Små justeringer vigtige
- Har tilrettelagt dagen så SOC bliver stabil
- Tekniske problemer – reflekterer over, hvorfor den crasher
- De tekniske problemer giver udslag i humør/besvarelserne
- Mange ting man skal huske
- Vil egentlig godt sidde selv, når hun kommer hjem – hvis rutinen brydes kommer det til udtryk i besvarelserne
- Energi efter lur
- Spekulationer over, hvordan man forstår spørgsmålene
- Hvad er energi
- Hvordan hænger fx energi og balance sammen
- Ærger sig over, at hun ikke fra starten havde skaleret fra ’midten’
- Brugte ikke hele ’bjælken’
- Selvom man er træt skal man måske placere sig i midten
- Frisk luft giver godt humør
- At cykle og gå
- Skoven gør glad – vælger skoven
- Henter energi

- Det giver energi, hvis man ikke skal forholde sig til noget
- Elsker at ose
- Bestemmer selv farten
- Men det skal give mening – ikke bare ose for at ose
- Henter energi i kaffe og te – der er noget afslapning forbundet med det
- Udsving i humør i forbindelse med familiebesøg
- Træt længe efter familiebesøg
- Kan godt være flere dage om at komme op på energi efter en anstrengende dag
- Har aldrig rigtig forstået det
- Batterierne bliver ikke rigtigt ladet op igen
- Finder energi til at være sammen med sine drenge, som udspringer af glæde
- Alle andre kan høre mobiltelefonen, men hun kan ikke
- Mange gange hun har genstartet – op til tre gange i én besvarelse
- Sukkerkold, hvor hun rystede – meget ubehageligt
- Tror hun bruger mere energi, der giver sig udslag i at hun ofte har oplevet det
- Generelt i godt humør – har nemt ved at være i godt humør
- Tror hun har en god oplevelse af sammenhæng
- Når en af værdierne bliver meget lav, påvirker det de andre
- Hvor længe sidder en dårlig oplevelse i kroppen?
- Meget bevidst om, hvad hun skal gøre, for at passe på sig selv
- Småjusteringer, der skal til, for at gøre situationen bedre
- Betyder meget at hun fx har en time inden andre møder på arbejdet
- Perfekt arbejdspladsindretning – har aldrig haft det så godt (høremæssigt)
- Kantinen er forfærdelig hvad angår støj
- Sjovt at se, hvordan HRV er, når man sover
- Læser HRV storytelling
- Data er med til at hjælpe hende til at huske, hvad der er sket

## **Mona – dialogue, May 2013**

### **Notes from dialogue:**

Mandag den 22. 16-17 vejledning

Sundhedsplejen 12.30 – 14.30 sammen med 6 personer

kl 20-22 sammen med psykolog

Natten lørdag til søndag sov ikke godt – hele kroppen kløede

M er interesseret i vide, om der har været HRV-udslag:

- Mandag den 22. 16-17 vejledning – hun er usikker på sin vejleder og på, om hun synes, at M gør det godt nok i sin PhD. Der er et dårligt psykisk arbejdsmiljø baseret på APV-vurdering, og det føler M sig også påvirket af. Særligt i kontakten med sin vejleder.
- Sundhedsplejen 12.30 – 14.30 sammen med 6 personer – er lidt usikker på kommunikationen og om hun kan høre, hvad der bliver sagt
- kl 20-22 samtale med psykolog, der skal hjælpe med noget PhD-relateret arbejde
- Natten mellem lørdag og søndag sov hun ikke godt, fordi hele kroppen kløede – det viste sig hun havde fået helvedesild.

Katja tjekker op på tidspunkterne og sender mail med feedback samt link til filmen om høretab.

samt

- træning fredag, lørdag og mandag

Der er tydelige udslag, når M træner. HRV-målingerne falder dog lidt ud under træning, da hun sveder og patchen falder af.

Metoden har været med til at M har evalueret på sin situation:

- Hun er gennem besvarelserne blevet opmærksom på, at hun er meget alene. Hun har tidligere beskrevet, at hun valgte at lave en PhD, dels fordi der er færre møder, og hun kan tage sine h.a. af, når hun arbejder alene på kontoret, hvilket gør, at hun ikke får tinnitus, som hun har haft problemer med tidligere. Dog har det fået hende til at tænke på, at det var bedre, da hun boede i andelsboligforening, hvor der var fællesspisning ind imellem, da hun er meget socialt anlagt. Nu bor hun i lejlighed alene i centrum af Århus og savner kontakten med andre mennesker, idet PhD-jobbet er ensomt.
- Hun har hele tiden sagt, at hun ikke ville forske videre, fordi hun gerne vil være en del af praksis, men M er under testforløbet begyndt at tænke på, om det alligevel ville være en god idé at fortsætte med forskningen, fordi det passer godt med hendes hørelse og de behov der er forbundet med det (færre møder etc.). Hun føler det er en svær balancegang. Dog skal det være en forskerstilling i f.eks. en kommune og f.eks. med deltid på uni. så det ikke bliver så ensomt.

## Appendix B. Analysis of the dialogues

**1. open coding** = going through data line by line, identifying categories, properties and dimensions

**2. selective coding** = grouping into larger categories

**3. theoretical coding** = *finding constructs of categories, connecting them and considering the nature of that relationship. The theoretical level of coding is dealt with in Articles 3 and 4 in this thesis.*

### Analysis – John

#### Open coding

*The comment-boxes were used for clustering categories initially – these unfortunately had to be deleted due to the format of the thesis*

- Technical issues with the ESM/log-system
- Not able to act
- Loss of control
- Frustration
- Reconciliation – looking at the positive side (It worked the first two and a half days)
- Helping Christian
- Wanting to do something good for others
- Being a good colleague
- Empathy
- Resources - personal, mental
- Confirming the relevance of the question in the ESM (line 15)
- Awareness
- Illness
- Coping /managing
- Physical resources
- Mental resources
- Satisfaction in life
- Meaningfulness
- Looking inwards
- Health
- Change of lifestyle
- Taking control

- Proving something to oneself – looking to the extreme
- Relaxation – the shock has subsided
- Failing to grasp what is happening
- Eating healthy
- No alcohol
- Weight loss
- Pride
- Satisfaction
- Making a decision and sticking with it
- Death
- Fear
- Reaction
- Being in charge of one's life
- Strong opinion
- Disagreement
- Authority
- Having to take medicine
- Stubbornness
- Success
- Being right
- Strong effort
- Reaching a goal
- Disappointment (when achieving a hearing loss)
- Hearing loss
- Frustration
- Loss of control
- Tinnitus
- Energy level
- The connection between tinnitus and level of energy
- Interface design
- Ideas
- Feeling ownership
- Irritation (tinnitus)
- Constant noise
- Not being able to ignore the sound
- Dilemma (tinnitus or other noise)
- Insight (his own hearing loss)
- Curiosity (data)
- Shyness – becoming aware of how revealing the data is
- Confusion (about the noise-value)
- The connection between overview, meaningfulness and balance
- Engagement
- Reflecting
- Self-image
- Remembering

- Tinnitus and the effect on the heart
- Understanding data
- Love cooking
- Not stressed but irritated
- Burnout
- The need for relaxation
- Acceptance from others /lack of
- The necessity of acceptance /require acceptance
- The effect of tinnitus/frustration
- Looking at the bright side
- Focus on the positive things about the situation
- Loss of control when tinnitus starts
- Body in shock
- The body reacting negatively to tinnitus
- Gaining more control through adjusting hearing aids
- Feeling fortunate compared to Christian, who he imagines has no control at all over his hearing loss
- Feeling ashamed/frustrated that he couldn't get the ESM-system to work
- Noticing what is happening in the moment
- Increased awareness of potential stressors
- Willingness to be a part of the project
- Interest
- Importance
- Doing good and helping others
- The importance of not being in need of any help himself

## Selective coding

### Technical issues

- Technical issues with the ESM/log-system
- Not able to act
- Loss of control
- Frustration
- Feeling ashamed/frustrated that he couldn't get the ESM-system to work

### Reflections on contexts

- Illness
- Health

- No alcohol
- Weight loss
- Change of lifestyle
- Eating healthy
- Satisfaction in life
- Meaningfulness
- Love cooking
- The connection between tinnitus and level of energy
- The connection between overview, meaningfulness and balance
- Reflecting
- Tinnitus and the effect on the heart
- The need for relaxation
- The body reacting negatively to tinnitus
- Body in shock (when tinnitus starts)

### **The present moment**

- Noticing what is happening in the moment
- Increased awareness of potential stressors
- Awareness
- Looking inwards
- Shyness – becoming aware of how revealing the data is (photo of door: making excuses)

### **Being able to help others**

- Helping colleague through participation
- Wanting to do something good for others
- Being a good colleague
- Doing good and helping others
- Resources - personal, mental
- Willingness to be a part of the project
- Empathy
- Interest
- Importance

### **ESM design**

- Confirming the relevance of the question in the ESM

- Interface design
- Ideas

### **Reflections on data**

- Confusion (about the noise-value)
- Remembering based on data

### **Empowerment**

- Coping /managing
- Physical resources
- Mental resources
- Insight (his own hearing loss)
- Curiosity (data)
- Feeling ownership

### **Control/loosing control**

- Failing to grasp what is happening
- Death
- Fear
- Having to take medicine
- Disappointment (when achieving a hearing loss)
- Hearing loss
- Frustration
- Loss of control
- Tinnitus
- Energy level
- Constant noise
- Not being able to ignore the sound
- Loss of control when tinnitus starts
- Reaction
- Proving something to oneself – looking to the extreme
- Making a decision and sticking with it
- Taking control
- Being in charge of one's life
- Strong opinion
- Disagreement
- Authority



- Gaining more control through adjusting hearing aids
- Stubbornness
- Pride
- Satisfaction
- Success
- Being right
- Strong effort
- Reaching a goal
- Feeling fortunate compared to Christian, who he imagines has no control at all over his hearing loss
- The importance of not being in need of any help himself
- Relaxation – the shock has subsided
- Dilemma (tinnitus or other noise)

### **Negative feelings**

- Irritation (tinnitus)
- Not stressed but irritated
- Frustration

### **Involvement**

- Engagement
- Understanding data

### **Reflections on stigmatization**

- Self-image
- Acceptance from others /lack of
- The necessity of acceptance /require acceptance

### **Mental distress**

- Burnout

### **Staying positive**

- Looking at the bright side
- Focus on the positive things about the situation

- Reconciliation – looking at the positive side (It worked the first two and a half days)

## Selective coding - John

### Tekniske udfordringer i forbindelse med dataindsamling:

Ja, den gik i stå. Jeg kan ikke huske, hvad det var jeg svarede... jeg svarede på et eller andet, og så skulle jeg... da jeg var færdig med at svare på et spørgsmål, så skal den jo komme med en grøn pil...

... hvor du skal videre, og den kom aldrig. Og jeg kunne heller ikke gå tilbage, jeg kunne heller ikke lukke og begynde forfra... den stod simpelthen fast i det der.

Det er børnesygdomme, ja. Men ellers så virkede den meget godt de første par dage – to en halv dag.

Næh, det ved jeg heller ikke. Kan den ikke have siddet ordentligt på, eller.... [kommentar til: "...men de andre dage har vi kun halv... eller lige nogle timer. Og hvorfor, det skal jeg ikke kunne sige"].

Ja, jeg kunne sådan set godt have gået med det hele ugen, men den der [refererer til mobiltelefonen] den opgav jo. Jeg kunne simpelthen ikke få den til at gå ud af det der... det var som om den var fastlåst.

### Idéer til forbedring af testsystemet:

Ja, det var måske en god idé, fordi jeg er slet ikke i tvivl – det er den, der i den grad irriterer mig, og det er jo garanteret også den, der tager ens energi jo [som svar på kommentaren: "... der er jo mange, der har tinnitus sammen med et høretab. I hvilken grad er der tinnitus? Er det slemt lige nu eller ej? Det kunne måske godt være noget, der skulle med"].

Men det kan jo godt være man kan lægge nogle programmer ind om lige netop tinnitus [...] "Har du tinnitus lige nu?" fx eller...

### Eget høretab/egen situation i forhold til andres:

Ja, det er jo nok... som Christian jo har nok de største problemer med, altså, det kan hjælpe ham på en eller anden måde. Det er vel derfor, vi har lavet det.

Altså jeg kunne da godt forestille mig, at Christian kører hurtigere træt.

Jah, det er da dejligt også. Det er værre for dem, der ikke kan gøre noget ved det. Sådan en som Christian, jeg tror ikke han kan gøre noget ved det.

### **Øge opmærksomhed på egen situation:**

Jeg har nok altid gået og tænkt lidt over det... jeg har haft to blodpropper i hjertet, og det har givet mig nogle ting hen ad vejen at tænke på også, men altså... jo jeg har nok tænkt over hvordan jeg har det i hverdagen ... om det bliver for meget, eller hvad det gør.

Jah ... i det hele taget så skal man jo tænke over, hvad det er man går og laver, og hvordan man har det med at lave det, man laver.

Der er da også nogle ting man sådan har gået og lagt mærke til, når den nu bippede eller ”nu skal du lige svare her” ”nå, ja” ... sååå man bliver da lidt mere opmærksom på alle de ting, der foregår omkring én.

Jamen det har det, det synes jeg da [kommentar til: ”Så tvinger det én til lige at blive opmærksom på nuet. Det er jo godt, hvis du også synes, at det ligesom har gjort det, fordi....”].

### **Fokus på fysisk aktivitet, sundhed og velbefindende/sygdom:**

Ja, det [fysisk aktivitet] er gået lidt i vasken nu her pga. ... det er jo ... de sidste 16 år, der har jeg da dyrket motion jævnligt og ... har også løbet nogle maraton også for at holde helbredet oppe.

Og det er jo nok det der med at tænke på hele tiden at have det godt og være velfungerende og... på den måde i hvert fald der er motion jo super godt.

Jeg fik to blodpropper, og jeg tænkte ”jamen det kan ikke passe det her... det kan ikke passe. Så usundt lever jeg sgu da heller ikke, vel” ... så prøvede jeg at lave mit liv om og begyndte at løbe og spise sundt – jeg spiste grøntsager og jeg spiste faktisk kun sundt. Det var meget sjældent vi levede usundt og vi fik øl og vin og sådan noget. Og det var også med et resultat at jeg tabte jo ... hvad fanden var det

... 12-13 kilo bare lige sådan ret hurtigt. Jeg har været helt oppe at veje 90 ikke, og det... det var jo også alt for stor, men øh...

### **At beslutte sig for at leve sundt og ville livet:**

Det har jeg også. Det er jeg så holdt lidt op med desværre ... det ved jeg ikke hvorfor, men jeg tror det er sløseri et eller andet sted ... ha ha ha ha.

Ej det var så mens alt det her sygdom kom, så tænkte jeg "ej, det skulle fandeme have en ende". Så smed jeg faktisk de der 12-13 kilo og begynde faktisk at motionere... jeg har løbet 8 maraton og adskillige halvmaraton og...

Det skulle bare være sådan. Så fra dengang af, der begyndte jeg i hvert fald at tænke meget over det, hvordan livet var... på sygehuset får man jo at vide, at det her det dør man af. "Nå, det skal I fandeme ikke bestemme" ... ha ha ha.

Jeg havde det også sådan med medicin ... jeg ville ikke have medicin. Så sagde min læge – hjertelæge – han sagde "Det forfølger dig resten af livet". Nej det skulle han fandeme ikke bestemme, det var helt sikkert. Jeg fik Beta-blokker og jeg ved ikke hvad. Jeg var fandeme halvmæt, når jeg havde spist alle de her tabletter.

### **Succes gennem stædighed:**

Det var jo så lidt stædighed, der sagde at jeg ville ikke have dem. Jamen det ville han godt være med til det forsøg der... Og så kom jeg i løbet af et år ... der var jeg faktisk ude af alt det medicin.

Jeg havde også et halvhøjt kolesterolindhold osv. De tabletter kunne jeg så ikke tåle – det var sådan nogle muskelkramper, man fik, så dem VILLE jeg af med. Det var så også meget imod hans vilje, altså ... Nej nej overhovedet ikke [svar på spørgsmålet: "Så du bruger slet ikke noget medicin nu?"].

### **Oplevelse af uretfærdighed:**

Mmm... ja. Og så kom der sådan noget med ørerne her, og så tænkte jeg "nå jamen det kan da heller ikke være rigtigt, at man... det er jo så bare sådan.

### **Sammenhæng mellem tinnitus og træthed:**

Altså jeg er jo opmærksom på netop tinnitus fx, og det er jo den, der trætter. Det tror jeg på. Og hvis det er for overvældende med tinnitus, så kan jeg godt mærke, at så forsvinder energien simpelthen. Så kører det jo bare hele tiden.

Der bliver spurgt om, hvordan man har det med energi i løbet af... og den har jeg markeret bare som dalende. Det er pga. tinnitus. Det er jeg slet ikke i tvivl om.

jeg er slet ikke i tvivl – det er den, der i den grad irriterer mig, og det er jo garanteret også den, der tager ens energi jo. Fordi den konstante hyletone – du kan næsten ikke lade være med at gå og tænke på den. Også selvom du har en masse andet at tænke på, ikke. Så hører du den ind imellem. Så skal man skrue mere op for høreapparaterne – så hører man mere udefra. Men så skruer du fandeme også op for så meget andet støj, ikke også.

... der er da ingen tvivl om, at tinnitus det er den store årsag til at man bliver træt... i mine ører og øjne i hvert tilfælde.

### **Frustration/dilemma i forbindelse med tinnitus:**

jeg er slet ikke i tvivl – det er den, der i den grad irriterer mig, og det er jo garanteret også den, der tager ens energi jo. Fordi den konstante hyletone – du kan næsten ikke lade være med at gå og tænke på den. Også selvom du har en masse andet at tænke på, ikke. Så hører du den ind imellem. Så skal man skrue mere op for høreapparaterne – så hører man mere udefra. Men så skruer du fandeme også op for så meget andet støj, ikke også.

Der havde jeg ikke været i Sønderborg, nej. Jeg har lige været dernede nemlig. Og der prøvede jeg at få lavet en masse tests dernede både med og uden høreapparater. Og det viser sig, at jo mere jeg skruer op for mine høreapparater, jo mere hører jeg faktisk ikke, fordi... det giver meget mere støj. Men det tager min tinnitus, når jeg skruer op for det, fordi så hører jeg bare støjen i stedet for. Så hører jeg ikke tinnitussen, vel.

Ja, en gang imellem gør den [svar på: ”kan du mærke at den der tinnitus den går dig på en gang imellem?”]. Der er nogle dage, hvor man tænker ”hold da kæft mand, kunne man da aldrig blive foruden det her?” Det er der heldigvis ikke hver dag, og heller ikke hele dagen vel.

**Nysgerrig på data/data som indikator:**

Jamen jeg er meget spændt på at se den der hjerterytme der.

Er der stor forskel [spørgsmål til udtalelsen: ”Og vi plukker bare nogle situationer ud og går ind og kigger på, og så skal jeg nok lige vise dig, hvordan din hjerterytme ser ud, når du sådan er normalt afslappet og når du sådan går og arbejder ude...?”]

Men der er alligevel en forskel, for før var den på 800... nu er vi oppe på 1200 [kigger på HRV-målinger].

Tinnitus behøver vel heller ikke gå ind og påvirke ens hjerte, gør det det?

Altså det der er med tinnitus... altså lige nu har jeg ikke noget. Så kan det komme sådan her [knipser]. Og så er det der bare. Det kommer som en hyletone - det er som at trykke på en knap. Og det vil jeg godt vove at påstå, at det kunne man garanteret se der [på HRV-målingerne], fordi man er virkelig opmærksom på det.

**Anvender data til at huske:**

Hvordan ser billedet ud her? [kigger på billedet] Jamen det er inde på værkstedet. Der kan meget vel være ingen støj der.

Hvad siger vi... fire dér hvor hun støvsuger... det er jo mindre [værdi], må det være... jo mere støj. Hvad er det dér?

**Strategier i forbindelse med tinnitus:**

John: Nej jeg er ikke stresspåvirket – det nok mere irritation. Hvis man har tinnitus sådan en hel dag, så kan jeg godt forestille mig at så er man kørt ned, når man er færdig med at arbejde. Det der så også er, er at når jeg kommer hjem, så smækker jeg lige bene op på bordet. Det er ikke ensbetydende med at jeg sover, men bare slapper af.

Ja, så enten hvis jeg har høreapparaterne på tager jeg dem af, eller hvis jeg ikke har dem på så tager jeg dem på, og så skruer jeg op, og så forsvinder det nogenlunde hurtigt.

--

## Analysis – Christian

### Usikkerhed og stress forbundet med test-systemet:

Det krævede lidt en tilvænning med alt det udstyr ud over det vi i forvejen har på baggrund af høretab. Det var lidt en stressfaktor for mig – i hvert fald den første dag – og lige finde ud af hvordan teknikken reagerede, og hvad kan jeg gøre hvis nu det opfører sig anderledes end forventet eller var blevet instrueret om.

Som jeg nævnte lige inden vi gik i gang, så var der den første dag, fordi jeg lige skulle håndtere den nye teknik, fordi jeg havde mit eget også, og mobiltelefon osv. Men det at jeg skulle svare har da også været lidt en stressfaktor ind imellem... jeg var bl.a. med som bisidder ved en jobsamtale på jobcentret i Skanderborg sammen en der også bruger CI – der var jeg lidt stresset, fordi jeg samtidig skulle være på med det møde der.

Hvis den kan komme på ens egen telefon vil det være et godt skridt i den rigtig retning. Men så er der selvfølgelig også det, at den arbejdsrelaterede situation i forbindelse med at man står midt i et eller andet og så skal man til at svare igen. Men i det store billede synes jeg det var ok.

Ja, den faldt også af nogle gange [HRV-måleren].

Der havde jeg også lidt tvivl om, hvad der mentes med det. Hvad var indgangsvinklen i forhold til det med støj? Er det når der er meget støj udenfor mig? Eller er det når jeg selv har nogle dårlige lydmæssige forhold? Det er jo et meget bredt begreb det der med støj.

Ja, og hvad var det for en situation, jeg skulle forholde mig til? Eksempelvis situationen hvor jeg sidder sammen med lærerne og eleverne. Der er jo masser af støj og dårlig kommunikationsforhold for mig. Men det er jo ikke ens betydende med at jeg ikke kan sidde og snakke med den overfor mig, vel. Så hvor tolker jeg lige henne, om det er et problem eller ej?

Og det er det, jeg ikke lige kan huske, hvornår var hvad i forhold til når jeg skulle svare på støj-forholdene. [...] Der er nogle forskellige indgangsvinkler til, hvornår er der god kommunikation og hvornår er der dårlig kommunikation. [...] Men det er noget jeg er kommet til at tænke nærmere over i løbet af ugen: hvad er det lige det handler om her, ikke. Også i forhold til at sidde hjemme og se fjernsyn. Er det det jeg kan høre fra fjernsynet, kan jeg høre, hvad der bliver sagt eller kan jeg bare høre, at der er noget?

Ja, og det er det, jeg har svaret på. Men jeg oplevede at mit udgangspunkt for at svare på kommunikationsspørgsmålet var forskelligt. Nu fx her på arbejdet, hvis jeg har haft en god snak med en person, men der var omstændigheder omkring mig, der gjorde at det ligeså let kunne have været en elendig kommunikation. Men det fik jeg ikke lejlighed til at beskrive.

Ja, der var et eller andet omkring middag, der brummede den hele tiden.

Ja, det var lige der hvor jeg ikke forstod hvorfor telefonen ikke reagerede som den skulle.

Ja, jeg satte den fast med et stykke plaster på et tidspunkt [HRV-måleren].

Ja, den er faldet af [HRV-måleren].

Jo, den lå ved siden af mig da jeg vågnede og så tog jeg den på igen så godt jeg kunne [HRV-måleren].

### **Idéer til forbedring af testsystemet:**

Altså, der var en der kom op i mig nogle gange: at vi ikke lige skulle beskrive "hvad tænkte du?" "Hvad tænker du nu?" fx Hvad tænker du i den situation, du skal svare? [...] Ja, det kan jo godt være kortfattet: "Hvad skal du i aften?" Tænker du på hvad du skal efter arbejde eller er det familien derhjemme? Eller hvad det nu måtte være for den enkelte. Eller er det noget, der lige er sket, man tænker på? Det må også kunne bidrage med noget. [...] Altså de tanker du har er også med til at farve det du svarer: er du i godt humør eller... og det er jo mange gange de tanker, man lige har, og det synes jeg ikke rigtigt man får lejlighed til at beskrive ganske kort: Hvad tænker du? Til at underbygge de spørgsmål, man nu skal svare på. [...] Ja, ellers kan man bare springe over jo, hvis man ikke lige er i en situation, der gør at man kan skrive kort om det. (...)



**Tilvænning til test-systemet:**

Men efter den første dag begyndte jeg bare at gøre det, når nu den brummede den her telefon. så begyndte jeg bare at gøre det uden at tænke over det.

**Spontane besvarelser "fra hjertet":**

Jeg begyndte også at gøre det uden at tænke over svarene her og nu. Uden at reflektere over"...hvordan svarede jeg, var det nu rigtigt..." osv. Jeg svarede bare på hvordan jeg havde det her og nu.

**Øge opmærksomhed på egen situation:**

Men det gav da selvfølgelig nogle tanker omkring mit medfødte hørehandicap; hvordan har min krop kunnet kompensere for det på anden vis i forhold til hvis jeg havde været normalthørende. Det er ikke noget jeg ellers har tænkt nærmere over, men det har det her (red. testforløbet) bl.a. været med til at få mig til at tænke over. At man har brugt sin krop på en anden måde som kompensation for sit høretab. Det er jeg overbevist om. Men om man så... ja selvfølgelig er man også anderledes i nogle situationer.

Ja, det giver også én nogle signaler til, hvad var det der fik mig til at gøre det her? Så bliver man bevidst om det. Det er der absolut ingen tvivl om.

Altså der har været nogle enkelte episoder, hvor jeg bare har svaret sådan uden at tænke så meget over svarene og så bagefter "...var det nu rigtig..." sådan lige et kort øjeblik "...ja, ok, det var fint nok". På den måde kommer man ind og reflekterer over dine egne tanker og handlinger, mens du er i forskellige... og det vil åbne op for ens bevidsthed, helt sikkert. Det vil fortælle én... lære ens eget jeg at kende bedre på nogle lidt andre måder.

**Øget opmærksomhed på sammenhængen mellem høretab og kroppens reaktioner:**

Ja, altså...måske ikke på vagt, men mere opmærksom. Jeg har i hvert fald observeret, at jeg ser flere ting før alle andre ser dem... med mit syn. Og det kunne jeg godt forestille mig er en kompensation for mit høretab.

Ja, og så tænker jeg også jamen har det også noget at gøre med de indre organer... kompenserer de også på en eller anden måde? Det at vi har skullet gå med den her hjerterytmemåler har fået mig til at tænke over om andre af kroppens funktioner også fungerer anderledes som en slags kompensation for høretabet? Det kunne jeg godt forestille mig.

Ja ja, men det gør det. Og det tror jeg sker også ubevidst. Det har jeg en oplevelse af nogle gange, at jeg oplever ting uden at tænke over det, men som kroppen reagerer i forhold til på én eller anden måde.

Nej det er rigtigt, det kan jeg ikke [nå at tænke over, hvordan kroppen reagerer]. Jeg er videre hele tiden, ikk', men jeg har en idé om at jeg bliver påvirket af nogle ting, som jeg enten negligerer, fordi jeg har fokus på noget konkret ikk', men som kroppen optager og reagerer i forhold til. Fordi jeg kan somme tider være så møghamrende træt – ikke fysisk på den måde men sådan rent mentalt og hovedet og har... og jeg forstår ikke altid hvorfor. Og det tror jeg er fordi kroppen har ageret i forskellige situationer uden at jeg egentlig selv har været bevidst om det i hjernen. Det er jeg sikker på, at der er en sammenhæng dér. Og så tænker jeg også nu hvor vi har gået med den hjerterytmemåler... er hjertet også på overarbejde hele tiden? Nu har jeg heldigvis et almindeligt sundt helbred... blodtrykket er ikke for højt i hvert tilfælde. Men jeg er bevidst om at lade være med at komme op i 'det røde felt', hvis jeg kan, for det kommer der som regel aldrig noget godt ud af.

Ja, men det er også... altså forsvarsposition det er også et stærkt ord, men det er den vej på [kroppen befinder sig i denne tilstand dagligt].

Ja, jamen det vil jeg meget gerne. Også netop som du var inde på lige før: jeg kunne godt tænke mig at vide om hjertet er på overarbejde hele tiden og om kroppen er i en stress-situation hele tiden.

### **Sammenhængen mellem høretab og at miste overblik/ forvirring:**

Ja, jamen det er jeg også helt sikker på. Nu her i forbindelse med at jeg fik CI i 2009 har jeg haft en periode – og det har jeg stadigvæk – hvor jeg bliver lettere forvirret, fordi jeg får nogle nye lyde ind for det første, som jeg ikke har kunnet høre tidligere. Men for det andet også, jeg kan ikke...ehh...organisere, hvor lyden kommer fra. Det er tit og ofte at jeg først hører lyden komme fra venstre side af, fordi det nu er venstre side, jeg har fået CI, ikk', men så kommer bilen eller andre støjkilder fra højre, og det har været trættende.

### **Sammenhængen mellem høretab og træthed:**

Det er tit og ofte at jeg først hører lyden komme fra venstre side af, fordi det nu er venstre side, jeg har fået CI, ikk', men så kommer bilen eller andre støjkluder fra højre, og det har været trættende. Og der har jeg en idé om at hjernen måske er på overarbejde i den sammenhæng.

Fordi jeg kan somme tider være så møghamrende træt – ikke fysisk på den måde men sådan rent mentalt og hovedet og har... og jeg forstår ikke altid hvorfor. Og det tror jeg er fordi kroppen har ageret i forskellige situationer uden at jeg egentlig selv har været bevidst om det i hjernen.

### **Bevidste strategier:**

Ja, der trækker jeg mig tilbage, så jeg ikke er nødt til at forholde mig til andre ... andre former for kommunikation. Og det har jeg brug for [svar på spørgsmålet: "Har du nogle ting, du gør, hvis du er ved at bliver frustreret?"].

### **Hvad kan bevidsthed om reaktioner bidrage med i det daglige?:**

Ja, det kan jeg mærke, men det er da også kun i kraft af, at jeg er blevet opmærksom på de signaler som kroppen nu fortæller mig eller omgivelserne fortæller mig, at "...nu er du på vej til at bliver frustreret eller vred, og så er det bedre at du forlader det sted, du er, og så lige falder til ro igen" [svar på spørgsmålet: "Og du kan genkende de situationer, når de kommer? At "nu er det nødvendigt at jeg lige trækker mig, for ellers bruger jeg mig selv for meget" eller hvordan tænker du?"].

Ja, altså hvis man kan få et resultat ud af den information, man har tilbagesendt igennem en periode... hvis man kan få et resultat ud, der viser, hvordan man reagerer, så tror jeg godt det kan give noget feedback til nogle mennesker, der har brug for at ændre på deres måde at være på.

Ja, det gør man [kommentar til: ”Ja, du bliver lidt mere tvunget ind i at opleve nuet og opleve dig selv i nuet...”]– ingen tvivl om det! Og det vil kunne hjælpe én... man vil kunne hjælpe sig selv meget hen ad vejen.

Det vil være en god indgangsvinkel til sit eget jeg forstået på den måde, at hvis man vil hjælpe sig selv – også på den lange bane – hvis man vil undgå nogle... måske ikke sygdomme men nogle psykiske lidelser... mange gange er det jo fordi man har haft det skidt i en meget lang periode, og så bliver man ramt af noget sygdom på baggrund af det.

Ja, der vil jeg tro at sådan et system som det her vil kunne stoppe mange mennesker og få dem til at tænke over at ændre deres adfærd [om at være på vej ind i et stress- eller depressionsforløb].

### **Omgivelsernes reaktioner:**

Jamen de syntes det var fint nok... det var ok [at han skulle besvare spørgeskema midt i et bisiddermøde]. Det var der ingen problemer i, men jeg blev alligevel påvirket af situationen.

### **Høretab, støj og kommunikation:**

Der er én situation, jeg er kommet til at tænke på. Det er når jeg sidder til pauserne sammen med lærerkollegerne og eleverne inde og får formiddagskaffe eller et eller andet. Og der kan jeg altså bare ikke kommunikere rent ud sagt. Jeg kan selvfølgelig lige med sidemanden og den overfor, men hvis der pludselig er nogen der siger noget til mig nede i den anden ende af bordet... det... og det kan jeg mærke, at det påvirker mig. Men om jeg bliver stresset af det, det ved jeg ikke, om jeg gør, men det påvirker mig i en eller anden omfang i hvert tilfælde. At jeg ikke kan opfange hvis der kommer noget kommunikation længere væk fra til mig.

Ja, nu nævnte du lige den situation dér fra 3. mands side. Jeg kan godt høre, at der er noget, men jeg kan ikke høre, hvad der bliver sagt eller om det specifikt er til mig, og så får man det lidt træls, ikk’. Og jeg ved på forhånd, at selvom jeg spørger igen, så vil jeg stadig ikke kunne høre det, hvis lytteforholdene er elendige. Så et eller andet sted opgiver jeg på forhånd fordi erfaringen fortæller mig, at jeg ville ikke høre det alligevel. [...] Ja, jeg oplever det dagligt.

Ja, jeg kan ikke mobilisere det overskud der skal til for at jeg kan få gode lytte-forhold [selvom han er alene]. Det handler også om hvad du selv har i dig af overskud i den situation.

### **Hørestrategier:**

Altså det er ikke en afslappet pause, som det egentlig er [...]Og det er også derfor jeg siger, at ind imellem har jeg bare time out. Der trækker jeg mig lige tilbage, trækker vejret dybt ind, og er lidt bevidst om det og får tankerne til at komme lidt ned på normalt leje igen. Og så er jeg klar igen.

Efter sådan en formiddagspause, der kan jeg godt bruge 5 min inden jeg reelt går i gang igen, ikke. Fordi "...hvad skete der lige her i den her pause...?"

Men jeg har heller ikke altid høreapparaterne på her om aftenen, fordi jeg bare trænger til at hovedet det skal slappe af.

Jeg sidder lige og koger ned, inden jeg kravler ind og får en lur. [...] Ja, det kan jeg godt se [taler om aflæsning af HRV]. Der sover jeg simpelthen. Men det er rigtigt som du siger, at jeg kan ikke bare komme lige hjem og smide mig. Jeg skal lige af med høreapparaterne og koge lidt ned med noget vand eller det sidste af morgenkaffen. Så først ca. en halv time efter jeg kommer hjem kan jeg begynde at lægge mig for at sove lidt.

### **Refleksioner over hvad støj, kommunikation og gode/dårlige lytte-forhold er:**

Der havde jeg også lidt tvivl om, hvad der mentes med det. Hvad var indgangsvinklen i forhold til det med støj? Er det når der er meget støj udenfor mig? Eller er det når jeg selv har nogle dårlige lydmæssige forhold? Det er jo et meget bredt begreb det der med støj.

Ja, og hvad var det for en situation, jeg skulle forholde mig til? Eksempelvis situationen hvor jeg sidder sammen med lærerne og eleverne. Der er jo masser af støj og dårlig kommunikationsforhold for mig. Men det er jo ikke ens betydende med at jeg ikke kan sidde og snakke med den overfor mig, vel. Så hvor tolker jeg lige henne, om det er et problem eller ej?

Og det er det, jeg ikke lige kan huske, hvornår var hvad i forhold til når jeg skulle svare på støj-forholdene. [...] Der er nogle forskellige indgangsvinkler til, hvornår er der god kommunikation og hvornår er der dårlig kommunikation. [...] Men det er noget jeg er kommet til at tænke nærmere over i løbet af ugen: hvad er det lige det handler om her, ikke. Også i forhold til at sidde hjemme og se fjernsyn. Er det det jeg kan høre fra fjernsynet, kan jeg høre, hvad der bliver sagt eller kan jeg bare høre, at der er noget?

Ja, og det er det, jeg har svaret på. Men jeg oplevede at mit udgangspunkt for at svare på kommunikationsspørgsmålet var forskelligt. Nu fx her på arbejdet, hvis jeg har haft en god snak med en person, men der var omstændigheder omkring mig, der gjorde at det ligeså let kunne have været en elendig kommunikation. Men det fik jeg ikke lejlighed til at beskrive.

### **Nysgerrighed omkring data:**

Hvad kan man læse ud af det [HRV-data]?

Ja, men det er faktisk interessant det her. Og det bekræfter mig i nogle ting.

### **Meningsfuldhed/opbygge energi og modstandskraft:**

Ja, så cykler jeg en gang imellem – og går. Men jeg er ikke sådan til teamsport på den måde. Men individuelt og sammen med nogle få venner til kajak. Natur og sådan noget. Og så forsøger jeg at spise sundt og holde mig i form på den måde.

### **Sammenhængen mellem høretab, fysisk aktivitet og kommunikation:**

Der var også en anden situation, jeg kom til at tænke på. Det var det her i forbindelse med kajak: hvordan har jeg det lige bagefter sådan en motionstur? Også i forhold til når jeg skal snakke med andre lige efter sådan en strabadserende tur.

Der er jo tit noget socialt (efter kajakroning), og nogle gange har jeg noget energi og andre gange er jeg bare helt... så kan jeg ikke...

**Overensstemmelse mellem data og oplevelse:**

Jeg kan kun nikke bekræftende. Det billede der passer meget godt overens med hvordan jeg i de forskellige situationer også har følt det selv, ikke. Så det er jo bare fint.

--

**Analysis Eva**

**Tilvænning til test-systemet:**

Det var mest den første dag, der tænkte man meget over at man gik med den der på, ikke, men så glemmer man det egentlig.

Ja, det lå ligesom i baghovedet: nu er den snart 20 min over, og så skal du hen og trykke på den der.

**Tekniske udfordringer med/usikkerhed omkring test-systemet:**

Min var en gang i timen, men det var ligesom at den forhalede det lidt der til sidst.

Ja, meget. Nogle gange skulle jeg trykke og trykke og trykke. Og der skete bare ikke noget.

Ja, jeg genstartede den nok en tre gange, tror jeg, hvor den bare ikke ville noget.

Men også det at den skulle stoppe om aftenen på et tidspunkt, det gjorde den jo heller ikke, der fortsatte den om natten.

Mm, det tror jeg ikke, fordi jeg havde gjort det sidste gang 22.20 en dag [stoppede mobiltelefonen med at prompte om natten?]. Jeg lagde den bare ude i køkkenet.

Men den var da klar 6.20 igen, så jeg ved ikke om den har været slukket eller slået fra på et tidspunkt.

Det er også sådan, at hvis man laver det samme i flere timer, fx sidder og slapper af, ser fjernsyn, så kan man jo kun trykke de samme ting ind. Så siger det jo ikke så meget.

### **Sammenhæng mellem aktivitet og humør:**

Joh... jeg synes egentlig... vi var på et kursus på et eller andet tidspunkt, og der kunne jeg godt mærke, at der var jeg ikke i det bedste humør.

### **Angst relateret til ikke at kunne høre og behovet for tryghedsskabende strategier/sikkerhedsnet:**

Der blev jeg sådan lidt mere stresset osv. og det er jo fordi jeg er vant til det der: kan man høre hvad de siger, når man kommer på det kursus eller er det helt lost at gå på det kursus? Det oplever jeg jo engang imellem, at man ligeså godt kunne være blevet hjemme. Så jeg tror nok at jeg fejler mig selv lidt op, når jeg skal på sådan et kursus der.

Når jeg er alene, så kan jeg godt finde på at sidde og slappe af med benene op på en stol.



--

## Marianne - analysis

### Technical issues

- Teknik – kan du se hvor mange gange den er gået ned?
- Svingende besvarelser med app
- Træt af den
- Den er svær
- Lokation ikke stabil
- Sidste opdatering ”ret dårlig”
- Usystematisk hvornår den går ned
- Besvarelserne komme ikke hver time
- Tekniske problemer – reflekterer over, hvorfor den crasher
- De tekniske problemer giver udslag i humør/besvarelserne
- Alle andre kan høre mobiltelefonen, men hun kan ikke
- Mange gange hun har genstartet – op til tre gange i én besvarelse
- 

### Reflections on contexts

- Energi – hvornår på dagen er den lav?
- Pause når hun kommer hjem
- Drak te – efter var hun træt
- Træthed kommer efter, man er på
- Man ’opper sig’
- Man har som regel ikke mulighed for at trække sig ud af situationer, der kan være trættende
- Kommunikation trættende
- Overvejer at møde lidt tidligere, fordi hun bliver træt efter frokost
- Mange ting man skal huske
- Vil egentlig godt sidde selv, når hun kommer hjem – hvis rutinen brydes kommer det til udtryk i besvarelserne
- Energi efter lur
- Frisk luft giver godt humør
- At cykle og gå
- Skoven gør glad – vælger skoven
- Henter energi
- Det giver energi, hvis man ikke skal forholde sig til noget
- Elsker at ose
- Bestemmer selv farten
- Men det skal give mening – ikke bare ose for at ose

- Henter energi i kaffe og te – der er noget afslapning forbundet med det
- Udsving i humør i forbindelse med familiebesøg
- Træt længe efter familiebesøg
- Kan godt være flere dage om at komme op på energi efter en anstrengende dag
- Har aldrig rigtig forstået det
- Batterierne bliver ikke rigtigt ladet op igen
- Finder energi til at være sammen med sine drenge, som udspringer af glæde
- Tror hun bruger mere energi, der giver sig udslag i at hun ofte har oplevet det
- Tror hun har en god oplevelse af sammenhæng
- Når en af værdierne bliver meget lav, påvirker det de andre
- Hvor længe sidder en dårlig oplevelse i kroppen?
- Betyder meget at hun fx har en time inden andre møder på arbejdet

### **ESM design**

- Synes ikke der er store udsving
- Det bliver lidt det samme i besvarelsene
- Det blev for højt niveau fra starten, så det blev svært at lave foreksellige
- Spekulationer over, hvordan man forstår spørgsmålene
- Hvad er energi
- Hvordan hænger fx energi og balance sammen
- Ærger sig over, at hun ikke fra starten havde skaleret fra 'midten'
- Brugte ikke hele 'bjælken'
- Selvom man er træt skal man måske placere sig i midten

### **Acoustics**

- Perfekt arbejdspladsindretning – har aldrig haft det så godt (høremæssigt)
- Kantinen er forfærdelig hvad angår støj

### **Reflections on data**

- Data er med til at hjælpe hende til at huske, hvad der er sket

### **Negative feelings**

- Ked af det dagen før

### **Involvement**

- Nysgerrig på HRV
- Sjovt at se, hvordan HRV er, når man sover
- Læser HRV storytelling

### **Mental distress**

- Træthed

### **Staying positive**

- Generelt i godt humør – har nemt ved at være i godt humør

--

### **Thor – analysis**

#### **Øge opmærksomhed på egen situation:**

Lige i starten syntes jeg det var lidt underligt, men spændende fordi du blev lige pludselig tvunget til at tage stilling til hvordan har du det egentlig? Føler du ikke du har overblik... Hvad er det egentlig for nogle situationer, du er i? Hvorfor synes du egentlig du mister dit overblik? Hvad synes du går dig på? Og det synes jeg da er rigtig spændende at give sig tid til selvansagelse, hvis man kan sige det på den måde. At blive opmærksom på sig selv. Hvordan går du egentlig og har det i din dagligdag? Altså hvad foretager du dig egentlig[griner]? Det kom lidt bag på mig.

Jeg tænker nok, at jeg er nok mere følsom overfor uvedkommende støj... altså den daglige... end jeg egentlig tænker over. Jeg kan ikke ret godt høre al mulig musik og sådan, hvis jeg skal føre en samtale og snakke med nogen. Det generer mig egentlig mere end jeg sådan lige tænkte over.

Det er jeg blevet mere opmærksom på ja. Det dur ikke for mig. Det kan være det gør for andre men det dur ikke for mig. Baggrundsstøj, hvis jeg skal konversere med nogen.

Det jeg sådan tænker, det er, at jeg synes, det var svært at vurdere: ”jamen hvordan er dit humør egentlig? Er du sprudlende glad eller lidt irriteret eller træls eller lidt ked af det eller hvad?” Det synes jeg er svært at vurdere ind imellem. Det er rigtig svært. Der skulle jeg virkelig...

Generelt så tror jeg egentlig at jeg er i sådan rimelig godt humør. Generelt!

### **Tekniske udfordringer i forbindelse med dataindsamling:**

Ja, det var da irriterende den formiddag. Jeg tænkte, at det kunne da ikke passe, at jeg ikke kunne få den til at virke [griner].

Og det var jo også godt jeg fandt ud af, at jeg lige kunne logge mig ind og så kunne jeg starte den op igen. Fordi ellers gik den jo død...

Altså jeg kunne ikke høre den brummede jo [15.13]. Det kunne jeg ikke.

Ja, jeg har bare sat den i. Så har den lyst orange, og når den så er holdt op med det, så må det være fordi... [den er ladet op]... det går jeg ud fra.

Jeg var kun bange for at jeg kom til at hive den af [HRV-måleren]... ellers har jeg ikke...

Der var lige en dag hvor jeg var på vej i bruseren så [laver lyd, gestikulerer og griner, for at vise, at han var ved at glemme at tage HRV-måleren af]. Panik!

...det ville den ikke optage.

Nej, der står godt nok... gem. Men der står fejl stort set hver gang.

### **Støj og kommunikation:**

Jeg tog et billede i morges... jeg var ovre på genbrugspladsen derovre. Der var det rigtig svært at følge kommunikationen, fordi de kørte med truck, og der kom... der var en lastbil, der kom. Det generede mig lidt.

Jo der... de kører og der er det rigtig svært at følge en samtale. Det irriterer mig.

Og så er der også en ting, jeg tænkte på. Det var den dag jeg var oppe på laboratoriet. Normalt når jeg er oppe på laboratoriet så slukker jeg for mine høreapparater, fordi der er så meget støj deroppe. Men jeg havde vagt, så jeg havde ikke slukket for dem. Så det generede mig sådan ind imellem. Men øh... det har jeg så vænnet mig til. De fleste gange slukker jeg det bare. Fordi normalt når jeg er oppe på laboratoriet så går jeg i min egen verden. Du skal koncentrere dig om det du gør, ikke også. Men når man har vagt skal de jo kunne få fat i én jo.

### **Afhængighed af tryghedsskabende strategier/sikkerhedsnet:**

Der er to ting i det. Det ene det var at min kone var af sted så jeg var alene hjemme. Så normalt så har jeg jo hende hjemme. Men det var hun jo ikke jo.

Ja, det ligger så dybt i én. At jeg er bange for jeg ikke hører det. Så sov jeg virkelig dårligt.

Ja, nervøs for hvis den ringer jo [utydelig snak]. Nå, der er ingen opkald. Så kan man godt sove videre. Det kan godt være meget stressende. Men efter jeg har fået den her rystepude, som jeg fik sidste år, der har det hjulpet betydeligt.

Ja, det har det altså. Men jeg oplevede på et tidspunkt at den svigtede. Det var da den var ny, fordi den var i stykker. Den har været defekt fra starten af. Det kunne jeg jo ikke vide, det var den første jeg havde jo.

Ja, at den virker hver gang [griner]. Men det gør den nu så [kan ikke høre hvad der bliver sagt]. Nu har jeg den højeste og den længste ringetone på mobiltelefonen, fordi så er jeg sikker på, at så.... [griner].

Ja, ja - det er noget man har registreret hen ad vejen. Hvad der hjælper én.

Jamen det er når der er problemer. Så ringer jeg ud til dem...[høreklubben] sådan, sådan og sådan. Jamen kom – kom forbi.

Den er faldet ja [hørelsen]. Jeg går jo også jævnligt til kontrol ved en speciel ørelæge for lige at tjekke, at det nu er i orden.

Ja, for jeg vågner jo fandeme hele tiden [af frygt for ikke at vågne idet han har vagt] – det er rigtig træls. Du bliver rigtig...

Ja, der er jeg lige faldet i søvn. Det er jo ikke så farligt at falde i søvn hen ad morgenstunden.

Men så kan man jo ringe til en ven [når man bliver kaldt ud til en vanskelig vagtopgave].

### **Afhængighed af (høre)teknik:**

Fuldstændig dybt. Og fandeme, jeg har fået den her... hov undskyld... jeg har glemmt min streamer derude, og telefonen den har bare bimlet hele dagen. Så går den ikke ind... så skal jeg ind [mumler og gestikulerer]... så er det svært at høre [mumler].

Det gør man... det gør man [bliver afhængig af teknik, når man har et høretab]. Og mit høretab det går sådan her... [laver summelyd og viser en nedadgående bevægelse]. Det går sådan her. Det kan jeg jo se hver gang jeg får nyt høreapparat.

Og de ved godt, at den her har jeg altid på mig [telefonen].

### **Frustration/irritation:**

ØV! [frustreret - høreteknik]

Og det er irriterende fx hvis jeg ser fjernsyn, så kan man se med det samme [laver høj lyd]... det passer ikke. Med tekst, der bevæger sig [?] Jeg kan se teksten... det bevæger sig ikke. Så siger konen ”Jo [kan ikke høre, hvad der bliver sagt].

Ja, det er noget lort [at være træt, fordi man ikke kan sove].

Jamen det har jeg sgu da også [irriteret over tanken om, at han havde svært ved at sove].

Jeg føler mig irriteret i hvert fald [over at lave meningsløst arbejde].

### **Høretab og kommunikation:**

Det er de høje toner, der er væk. Græshopper og sådan noget – det er mange år siden, jeg har kunnet høre dem. Men jeg ligger vist sådan rimelig godt indenfor taleområdet. Rimelig godt.

### **Afhængighed af kommunikations-strategier:**

Ja, og når jeg kigger på en. Det er utroligt så meget som det hjælper. For selvom jeg har høreapparat og går ved siden af nogen, så kan det altså godt smutte alligevel. Der er jo også alt muligt anden støj jo. Så selvom de er blevet bedre med årene høreapparaterne... væsentligt bedre... så vil jeg altså stadigvæk gerne se på folk.

Og det er irriterende fx hvis jeg ser fjernsyn, så kan man se med det samme [laver høj lyd]... det passer ikke. Med tekst, der bevæger sig [?] Jeg kan se teksten... det bevæger sig ikke. Så siger konen ”Jo [kan ikke høre, hvad der bliver sagt].

Det hjælper i hvert fald væsentligt [visuel kommunikation]. Det gør det. Nogle gange, når jeg er gået i seng og konen gerne lige vil fortælle mig et eller andet, så ”hvad siger du?”. Så nogle gange står jeg op og tager høreapparat på, fordi, når hun gerne vil fortælle et eller andet, fordi [laver opgivende lyd].

Jamen det er gode kolleger, vi har generelt. Og så kan de godt lave lidt fis. Og så nogle gange kan jeg godt høre de står og snakker bagved [mumler] bare for sjov [griner]. Så det er såmænd meget fint.

Ja, det ved de alle sammen [at han har høreapparat].

Ja, når det er godmodig humor, så er det jo sjovt nok. De har også brokket sig. Når jeg har min streamer med så kan jeg jo godt høre. Så siger jeg ”Hva’? Hvad siger I? Prøv lige en gang til” [griner].

### **Omgivelsernes reaktioner:**

Ja, det er svært, og hun [hans kone] bliver jo også træt af det ikke også og siger sådan ”åh” [laver opgivende/irriteret lyd].

**Egen rolle på arbejdspladsen/det kollegiale/relation til ledelse:**

Ja, laboratoriet der er jeg en gang imellem om formiddagen. Så jeg er meget ude. Jeg vil sige i sidste uge var lidt atypisk, for der var efterårsferie, så jeg var meget alene i sidste uge og jeg farede rundt her og der og alle vegne. Så den var lidt atypisk på den facon. Men ellers er jeg meget ude og så er jeg meget den, man kommer og spørger til råds. Jeg har været her i snart 25 år, så jeg har en anden viden, end den du kan købe dig til: ”hvordan fan’ er det nu lige det er...?”

Jeg har meget kommunikation ja. Vi har lige været til sådan en team-rolle... Jeg har fundet ud af at jeg er rigtig god til at formidle og holde sammen på tingene. Heh, så det var meget godt [griner højt].

Det skal man passe på jo. Det har jeg også fået at vide nogle gange, fordi der har været et par gange, hvor jeg var ved at gå ned med stress, fordi så var der lidt for meget af det ene og det andet. Så siger chefen også at nu må du lige tage dig sammen, fordi vi vil gerne beholde dig indtil du er 65. Jeg har sagt, at jeg vil gerne arbejde, indtil jeg er 65. Jeg ved godt at man med den alder man har kan risikere... men som udgangspunkt. Og det er min ledelse også bevidst om.

Jo, når de har registreret... så ”vi må hellere lige have en samtale med Clausen” [griner højt]. Det er fint nok.

Vi har en god kommunikation. Det har vi.

Nåh jamen så møder man jo også nogle gode kolleger og så bliver man jo nogle gange i godt humør, og siger åh nu... [mumler]

Eller også så siger de ”Glem det, vi kommer i morgen” [griner]. Det fungerer faktisk skide godt.

Ja, det er hyggeligt. Og hvad skal man kalde det? Godmodigt mobberi. Det er jo det der gør det lidt sjovt, ikke. Jeg kan jo også godt give igen jo.

der er ligevægt ja [forstår ikke resten af sætningen – der grines højt]

**Oplevelser af stress:**



Ja, jeg føler mig lidt stresset... så er der det ene og så er der det andet. Der var mange ting i vejen. Jeg havde sovet rigtig dårligt. Jeg var i rigtig dårligt humør og jeg var træt og der ”argh” [udstøder en høj irriteret lyd].

**Problemer med at udføre arbejdsopgaver pga. høretab/konsekvenser af høretab:**

Jeg hader at være træt om morgenen, det er noget af det værste jeg ved. Og det er irriterende, og så kommer man ind i tankegangen og så går det først rigtig galt. Og så skal jeg jo passe på at jeg ikke falder for godt i søvn, for jeg skal jo også høre telefonen [når han har vagt om natten]. Der er mange ting at holde øje med jo.

**Nysgerrighed på sammenhængen mellem oplevelse og biopsykosociale sammenhænge:**

Og så kunne jeg egentlig godt tænke mig lige at finde ud af her... jeg står og laver nogle ting, som i min verden er fuldstændig spild af tid.

**Meningsfuldhed:**

Det er rent molbo-arbejde, rent molbo-arbejde. Det er rigtig træls at bruge sin tid på. Fordi jeg har møg-travlt.

Ja, vi har faktisk to [plejebørn]. Og så har vi nogle i aflastning også. Det var vældig hyggeligt [taler om et billede af familien samlet fra log-data]. Det der er min kone og det er min ældste søster. Det der er Ollie, der har været hos os i tre år. Han er evnesvag, men han er rigtig glad og mangler en far. Så... [antyder, at det er han blevet for Ollie]

**Sammenhængen mellem valg af strategier, oplevelser og tilstedeværelsen af andre mennesker:**

Men der er jeg alene, for der var ikke nogen. Så kunne jeg sidde og slappe af. Når jeg er alene, så kan jeg godt finde på at sidde og slappe af med benene op på en stol.

Ja, jeg var alene hjemme og sad stille og roligt og slappede af.

--

## **Mona – analysis**

### **Nysgerrighed på data**

- Interessere i vide, om der har været HRV-udslag i forbindelse med vejledning samt møder, hvor hun oplever dårlig stemning og forventningsangst
- I forbindelse med at have sovet dårligt pga. helvedesild
- I forbindelse med træning

### **Sammenhæng mellem data og oplevelse**

- Hun er usikker på sin vejleder og på, om hun synes, at M gør det godt nok i sin PhD
- Der er et dårligt psykisk arbejdsmiljø baseret på APV-vurdering, og det føler M sig også påvirket af. Særligt i kontakten med sin vejleder.

### **Forventningsangst**

- Sundhedsplejen 12.30 – 14.30 sammen med 6 personer – er lidt usikker på kommunikationen og om hun kan høre, hvad der bliver sagt

### **Tekniske udfordringer**

- HRV-målingerne falder lidt ud under træning, da hun sveder og patchen falder af.

**Bevidsthed om egen situation og vigtigheden af at træffe bevidste valg/risikoen for isolation**

- Hun er gennem besvarelsene blevet opmærksom på, at hun er meget alene. Hun har tidligere beskrevet, at hun valgte at lave en PhD, dels fordi der er færre møder, og hun kan tage sine h.a. af, når hun arbejder alene på kontoret, hvilket gør, at hun ikke får tinnitus, som hun har haft problemer med tidligere. Dog har det fået hende til at tænke på, at det var bedre, da hun boede i andelsboligforening, hvor der var fællesspisning ind imellem, da hun er meget socialt anlagt. Nu bor hun i lejlighed alene i centrum af Århus og savner kontakten med andre mennesker, idet PhD-jobbet er ensomt.
- Hun har hele tiden sagt, at hun ikke ville forske videre, fordi hun gerne vil være en del af praksis, men M er under testforløbet begyndt at tænke på, om det alligevel ville være en god idé at fortsætte med forskningen, fordi det passer godt med hendes hørelse og de behov der er forbundet med det (færre møder etc.). Hun føler det er en svær balancegang. Dog skal det være en forskerstilling i f.eks. en kommune og f.eks. med deltid på uni. så det ikke bliver så ensomt.

## Appendix C. Participant stories

### Eva – works in the administration at a public institution in Northern Jutland

- Jeg er 64 år
- Nej, jeg ryger ikke
- Jeg mener at være i alm. god form
- Nej, ingen sygdom, der påvirker håndtering af stress i hverdagen
- Ja, en gang imellem er der stress på – især op til semesterstart og ved planlægning af eksamen
- Jeg ved, at det stresser mig at deltage i møder og lignende, hvor mange mennesker er samlet

Jeg var 35 år, da jeg fandt ud af, at den var gal med min hørelse. Min mand og datter havde igennem længere tid gået og sagt, at jeg da heller aldrig kunne høre noget. Og til sidst bestilte jeg så en tid hos ørelægen og fandt ud af, at den var helt gal.

Først mente man på Høreinstituttet, at mit høretab var arveligt betinget, men det gik de senere væk fra (nogle af mine familiemedlemmer blev undersøgt, og de fejlede ikke noget).

Nu siger de, at det højst sandsynligt skyldes sygdom eller medicin, jeg har fået som barn, fx den antibiotika, de brugte dengang.

Jeg har et temmelig stort høretab. Min hørekurve er en såkaldt bassinkurve, dvs. høretabet er størst omkring de 1000 Hertz (taleområdet).

Jeg har altid undersøgt markedet nøje for nye hjælpemidler, og her på arbejde har de også været flinke til at støtte op med forstærkertelefon mv., så jeg synes egentlig, jeg har klaret mit arbejde godt nok.

Allerede i 1992 gik jeg dog ned på en 30-timers arbejdsuge, fordi det blev nødvendigt med en hviledag midt på ugen.

## **Mona – PHD at a university in Jutland**

56 år

Ph.d.-studerende, MPH, sundhedsplejerske i gang med et interventionsstudie der kræver meget organisering – arbejder mere end 37 timer ugl. Med studier, artikler, organisering, planlægning af spørgeskemaundersøgelser, kurser og undervisning.

Fysiske form: Går til træning 20 minutter og svømmer efterfølgende 20 minutter og går til uni 3 gange ugl. Vandre i weekend og ferier ex. 800 km. Camino de Santiago. God grundform, men overvægtig.

Ikke syg.

Ja, jeg føler mig udsat for stress. Er årligt på 1 uges ski og vandreferier føles afstressende.

Jeg føler mig mere træt om aftenen og har behov for mere søvn. Især når jeg anvender høreapparater og jeg hører bedst skingre kvindestemmer.

Hørelse. Normalhørelse indtil for 4 år siden hvor jeg fik diagnosticeret en arvelig aldersbetinget hørenedsættelse. Begge mine forældre anvender høreapparater. Har en hørelse på cirka 30DB på alle frekvenser.

Når jeg arbejder ved skærmen sidder jeg på alene kontor og tager ikke høreapparaterne på. Når jeg har møde anvender jeg høreapparater. For 2 år siden havde jeg et mere udadvendt job, men mange flere møder end jeg har i dag – og skiftet har betydet at jeg ikke længere har tinnitus. At være ph.d.-studerende er dog mere ensomt, men det forebygger tinnitus.

## **Marianne – clerk and stats employee at a municipality in Jutland**

- Din alder: 50 år

- Hvor i landet du bor: Jeg bor i [REDACTED]

- Din arbejdsplads/ typiske arbejdsopgaver ; Jeg arbejder i [REDACTED] i [REDACTED] Kommune, hvor jeg er fuldmægtig/statistikmedarbejder og udarbejder ledelsesinformation, laver analyser i SAS(statistik program) vedr. [REDACTED]

[REDACTED], udarbejder figurer

og diagrammer i regneark osv.

- Hvordan opfatter du selv din fysiske form? Fin. Jeg cykler fra og til arbejde, og plejer at løbe to-tre gange om ugen (har svært ved at komme igang efter en periode med forkølelse og influenza).
  - Har du en sygdom eller andet, der kan påvirke, hvordan du håndterer stress i din hverdag? Nej
- Føler du dig udsat for stress i hverdagen? Ikke som sådan, men jeg er også i fleksjob, hvilket betyder at jeg på arbejde 5 timer om dagen - og derfor har lidt overskud til børnene m.m. Jeg er blevet rigtig god til at lade mit arbejde være på arbejdet.
- Er der noget i din hverdag, du godt kunne tænke dig at få mere klarhed over (det kunne fx være hvordan forskellige valg og aktiviteter indvirker på din krop, hvordan du forvalter din energi, hvordan forskellige situationer påvirker dit humør etc.) Min træthed er noget jeg gerne vil have mere styr på. Det at jeg mentalt er i gang hele tiden, om det så er en arbejdsopgave, kommunikation i kantinen, til mødet eller med min familie er for mig en uløselig problemstilling.
- Derudover vil jeg gerne bede dig om at beskrive din hørelse og hørehistorik med egne ord. Så kort og ærligt som muligt.. Jeg er født med nedsat hørelse og fik som 5-6 årig høreapparater, hvilket betød at en verden virkelig åbnede sig for mig. Jeg gik på taleinstituttets børnehave i Aarhus, hvor jeg lærte at tale og læse, hvilket gav en god start i folkeskolen. Efter gymnasiet tog jeg en uddannelse på landbohøjskolen senere efterfulgt af et phd studie på Københavns universitet og statens skadedyrlaboratorium. En tid der var hård, da gruppearbejde var svært for mig (hjælpemidlerne var ikke så godt udviklet), engelsk har jeg aldrig været glad for, men jo er nødvendigt når man tager en høj uddannelse. Som barn var jeg middelsvær hørehæmmet har altid været vant til at præsentere mig overfor nye relationer som hørehæmmet der hører "næsten" normalt med apparaterne på - en sandhed med modifikationer. Men jeg følte mig relativ åben omkring det at høre dårligt - klippede mig korthåret så folk kunne se mine høreapparater og den slags. Jeg har altid været bevidst om at vælge uddannelse og job ud fra at jeg ikke skulle gøre det mere svært for mig. Dvs. jeg fravalgte undervisning, job hvor telefonen bruges dagligt/er en del af arbejdet og job hvor jeg skal tale med mennesker på et andet sprog eller mennesker der taler med accent, taler svagt på grund af sygdom m.v. Men da jeg fik barn nummer to fik jeg et lille dyk i hørelsen og hører faktisk ret dårligt, 80-90 db nedsættelse på høreområdet, og da meldte trætheden sig og jeg blev udtrættet. Min læge sygemeldte mig, jeg skiftede afdeling på arbejdet, har fantastiske rammer, eget kontor, kun få møder, kunderne der efterspørger tal er de samme, nedsat tid, ... Jeg er afhængig af mundaflæsning, har i perioder tinnitus som dog dæmpes når jeg har høreapparaterne på.

## Christian – janitor at a boarding school in Jutland

Din alder: **57 år**

Hvor i landet du bor Silkeborg

Din arbejdsplads/ typiske arbejdsopgaver **Pedel og mindre håndværksmæssige opgaver**

Hvordan opfatter du selv din fysiske form? **Normal - måske mere fysisk aktiv - alderen taget i betragtning.**

Har du en sygdom eller andet, der kan påvirke, hvordan du håndterer stress i din hverdag? **Nej.**

Føler du dig udsat for stress i hverdagen? **Periodevis kan det forekomme! - når der sker "for meget"**

Er der noget i din hverdag, du godt kunne tænke dig at få mere klarhed over (det kunne fx være hvordan forskellige valg og aktiviteter indvirker på din krop, hvordan du forvalter din energi, hvordan forskellige situationer påvirker dit humør etc.)

**Ja! - hvordan jeg kan blive bedre til at træffe bevidste valg i forhold til min aktuelle formåen og situation - personlig energi anvendes optimalt uden at det "koster" for meget på andre områder.**

Derudover vil jeg gerne bede dig om at beskrive din hørelse og hørehistorik med egne ord. Så kort og ærligt som muligt.

**Medfødt hørehandicappet - mundaflæsning - HA bruger og CI bruger med diverse eksterne hjælpemidler.**

**Sætter står pris på skrivetolke - når disse er tilstede.**

## **Thor – mid-level manager at the waterworks in Funen**

Jeg tror nok noget af det du spørger om har jeg allerede fortaltom, men jeg er 60 år bor i [REDACTED], fyn, arbejder med spildevand til daglig hvor jeg dels passer diverse online-målere- laver analyser af spildevand og ellers ale forekommende arbejdsopgaver på renseanlæg/pumpestationer, har rådighedsvagt en uge af gangen ca hver 6. uge. min fysiske form er vel ok ikke at jeg er atlet men føler mig heller ikke affældig, jeg har ike så vidt jeg ved nogen sygdom der påvirker min hverdag med stress, men kan godt ind imellem føle mig stresset og usikker på arbejde, det er fordi jeg i forbindelse med mit job ofte taler i mobiltelefon og selv om jeg har en streamer til min telefon så er det ikke altid lige let at tale i telefon det er fordi der i kontrolrum på renseanlæggene kan være elektrisk støj der forstyrrer, jeg taler nødig i telefon uden min streamer da jeg så har svært ved at høre/forstå hvad der bliver sagt, i det hele taget vil jeg helst slet ikke tale i telefon, det ved mine kolleger godt men ind imellem kan det jo ikke undgås. jeg er heller ike helt tryk når jeg har vagt, er ofte benge for jeg ikke kan høre når vagttelefonen sender sms-alarmer, har overhørt det en enkelt gang heldigvis uden de helt store konsekvenser, nu har jeg fået en vibratorpude, den er god men frygten sidder alligevel i en for sådan en kan jo også svigte, har prøvet den ikke virkede men heldigvis hørte min kone telefonen så det gik.

Min hørelse ja den har været dårlig i mange år og er pogså blevet dårlige gennem årene, har haft høreapparat i mange år de første mange år havde jeg kun et også var det svært at retningbestemme lyden så det var en stor glæde for mig da OUH gav mig apparater til begge ører det var en helt ny fornemmelse at kunne registrere hvorfra lyden kom.

i min dagligdag synes jeg det gåt fint, det er svært ved sammen kommer møder på arbejde det er ikke altid jeg får det hele med men det har jeg efterhånden vænnet mig til, nu er jeg begyndt at ro havkajak , det er lidt problematisk for instruktørerne og også for mig for jeg er ret "ensom" på havet forstået på den måde at jeg ikke har høreapparat på når jeg roer, man kan jo tippe rundt og så er det slut med høreapparat, tror ikke de kan tåle en tur ned under vandet , men mine medroere er nu gode til at holde øje med mig og hente mig hvis jeg ikke lige har forstået et og andet,, i mit privatliv er det nok min kone der trækker det store læs, det er stor set hende der altid tager telefonen , når vi har børn ( vi har plejebørn i mellem ) benytter jeg mig ind imellem trådløs forbindelse til tv for når de snakker for meget kan jeg have svært ved at følge med i nyhederne etc. det der måske generer mig mest er at jeg og min kone ikke længer kan tale /hviske til hinanden når vi er kommet i seng jeg er nødt til lige at vende det bedste øre til og hun må tale ret højt for at jeg forstår hende helst vil jeg se på hende og også på folk når de taler til mig det letter forståelsen betydeligt



## Appendix D. Material Storytelling

Karen

Lisbeth

Sebastian

Anne



Lisbeth: Jeg har taget den her med, fordi jeg synes... hov undskyld [mikrofonen tændes til audio-systemet - mumlen]... jeg har taget den her med [ringer med klokke], fordi jeg synes den symboliserer støjen i mit liv. Jeg har arbejdet med børn, så... ja. [Henvendt til Katja] Vil du have mere uddybet i det end bare sådan?

Katja: Gerne alt det, I har at fortælle om... hvis der er noget I synes er... ja, du må meget gerne fortælle lidt mere.

A: Ja, fordi at så vil jeg så vende den om og sige, at det har ikke fyldt så meget indtil for 4-5 år siden – så begyndte larm rigtigt at fylde, og det er så også grunden til at jeg står her i dag.

Denne her har jeg taget med [viser en bold], fordi at jeg synes, at den symboliserer - det at den triller - at ind imellem så har jeg syntest, at mit liv bare triller derudad, og jeg kan ligesom slet ikke nå at få bremsen op og sige stop og få bearbejdet tingene.

[Viser en Lego-bil] Denne her har jeg taget med, fordi jeg øh... det er legen i mit liv. Når man har med børn at gøre, så har man også meget med leg og med glæde at gøre. Så den synes jeg er lidt vigtig også.

Denne her har jeg taget med som en kikkert, fordi jeg synes at den symboliserer min nysgerrighed. At jeg egentlig er meget nysgerrig – jeg ved godt, at jeg er meget stille, men jeg er også meget nysgerrig, når det kommer til stykket.

Og muslingeskallerne har jeg taget med. Fordi at jeg går tit ved stranden, når jeg søger ro og fred inde i mig selv.

Og så låner jeg lige den her, fordi det måtte vi godt [tager linealen]. Den her symboliserer, hvor jeg er lige nu: jeg er i gang med at renovere mit hus. Sådan. Vil du? [giver ordet til den næste].

Sebastian: Det kan jeg godt, men jeg skal lige hente to ting mere [man hører flere, der griner].

Katja: Nej undskyld, hvis jeg slukker, så virker den der ikke [hentyder til hovedmikrofonen i audio-systemet]. Så tænder jeg lige igen... sådan der.

Karen: Jamen den fungerer fint nok – det er mere, hvis du står og siger noget, så skal vi bare ikke holde på den der [hentyder til 'tale-knappen' på bi-mikrofonen].



Sådan dér.

Katja: Jeg tænker også, at I nærmest skal have den her, vil I ikke det [hovedmikrofonen]?

Sebastian: [Henvendt til Katja]: Jo, men det vil vi også godt. [Henvendt til de andre]: Det er fordi, hun ikke vil sige noget.

Flere af de andre: Nåh...

Katja: Jeg vil ikke sige noget – det er jeres proces nu.

Sebastian: Jeg skal bare lige finde et sted til den [prøver at placere mikrofonen i trøjen].

Jamen øøøhm... jeg har ligesom prøvet at kigge lidt mere på... hvad skal man sige... relationer i det her. Og ligesom også begyndt at tænke lige lidt... et skridt tilbage. Fordi jeg er jo i den situation, at jeg jo har fået en CI-operation, og det var egentlig derfor, jeg lige hentede denne her... det er godt nok en brandbil og ikke en ambulance, men øhh... ha ha [flere griner] ... men på en eller anden måde har det forløb jo sat en masse refleksioner i gang for mig. Men det, der så ligesom fylder mest i mit liv i øjeblikket, det er egentlig netop relationer. Altså; hvordan skal de udvikles over tid og hvordan ... hvordan får jeg dem til at blive, som jeg vil have dem? Altså jeg har jo i CI-forløbet måske droslet rigtig meget ned på en masse sociale ting – simpelthen fordi jeg ikke har kunnet holde til det. Det var jo alt for meget lyd hele tiden og jeg fik tinnitus og jeg kan fortælle en lang historie om det – det vil jeg ikke gøre nu [griner]... men men nu skal jeg ligesom på en eller anden måde have bygget det op, men jeg skal også ligesom finde ud af, hvordan skal jeg så være [griner] som person med den her nye, man kan næsten sige identitet. Jeg er

smølften [henviser til objekterne], og så sidder der nogle helt andre omkring mig [hører flere grine]. Så det er det, der fylder meget ... så en anden ting, der fylder meget lige i øjeblikket... det er måske lidt forkert det her, men det er egentlig mere bolig, den skal symbolisere, end den skal symbolisere det, der er derpå. Og det fylder egentlig meget, fordi jeg bor meget midlertidigt, og jeg har i en periode faktisk boet på mine forældres adresse, og nu er jeg så flyttet over i naboens hus i deres kælder. Men jeg vil jo gerne ligesom væk fra den der lidt underlige situation, som det jo bliver for mig sådan set. Men det er ligeså meget fordi at jeg har valgt at trækker pløkkerne op kan man næsten sige. Jeg skal kunne være fleksibel med job osv. [kan ikke høre hvad der bliver sagt]. Det var sådan lidt det.



Anne: Skal jeg så slukke for den her [henviser til mikrofonen]?

Karen: Det bestemmer du selv... om du vil høre dig selv. [Flere griner]

Anne: Det ved jeg nu ikke rigtigt [griner]. Bare den ikke giver ekko, så er det fint nok. [Tager en dukke op og børster den ren for sand] ...mit hyggetøj bliver beskidt. Det her det er mig. Og jeg har lagt mig til at sove, men jeg ligger med åbne øjne, fordi jeg har tinnitus, og det generer rigtig meget. Og så mens jeg ligger der med åbne øjne, så komme politimanden, og ham er jeg rigtig god til at slå mig selv i hovedet med: "Hvorfor gør du nu ikke sådan?" ... og lægger planer og strategier for, hvordan jeg nu lige skal stå op og finde ud af, hvordan jeg nu lige skal få arbejdsopgaverne til at hænge sammen. Øh... og så ligger jeg og fortæller mig selv, at: "når du nu står op, Anne, så får du det til at fungere. Du er nødt til at gentage, hvad din kollega, hun siger til dig, så du har forstået, hvad det er, hun siger. Og du er lige nødt til at have styr på den der... når den kunde der, han siger, at han vil have den vare der, så er du lige nødt til at gøre sådan og sådan. Gå hen i mappen og slå op om det nu kan passe, og gør nu lige dit og gør nu lige dat". Så jeg sådan kan få en ordentlig struktur i det og være sikker på, at jeg ikke har glemt noget. Og jeg ligger og vender og drejer mig, og så på et eller andet tidspunkt, så står jeg op, og så går jeg ned og glaner fjernsyn eller kigger i et blad eller læser en bog, og så tænker jeg: "nej, nu er jeg træt, nu går jeg i seng, og

så går jeg tilbage, og så sover jeg måske lige lidt, og så er jeg vågen igen, og så starter politimanden forfra. Og så for at slippe for alt det her virvar, så jeg kan få lidt ro oveni mit hoved, så kan jeg rigtig godt lide at komme ud og rejse. Så er der ingen forpligtelser og der er ikke noget arbejde. Der bare frirum. Der er ingen vasketøj, der er ingen madlavning. Det er bare mig og manden og sønnen nogle gange. Og holder i hånd og er kærester og oplever verden. Så, det var min historie.

[7.15 min]

Katja: Kan jeg tage billeder, eller... [Karen, der fotograferer, skal fortælle nu]



Anne: Jeg har lært det. Jeg har lært hvordan det fungerer [kameraet].

Katja: Du har lært det – super!

[løs snak omkring kamera – Sebastian ender med at tage over]

Karen: Jeg har altid følt at det her med arbejde – jeg har altid skullet følge hundesnoren, fordi jeg har altid haft hundesnor på og så har jeg altid fået at vide, hvor jeg skulle gå hen og sådan noget. Jeg har ikke rigtig haft et eget valg, hvor jeg kunne gå hen. Og terningerne det har

ligesom været lidt Jeopardy-agtigt, fordi, hvilket arbejde skulle jeg tage og hvor kunne jeg komme hen, fordi jeg har prøvet flere uddannelser, før jeg fik min

kontoruddannelse. Jeg faktisk været i gang med to en halv uddannelser før, som jeg var nødt til at opgive, så det har været sådan lidt en Jeopardy for at finde ud af, hvor jeg hørte hjemme. Og så er der tider – og det vil jeg sikkert få at vide, at det er jeg ikke – men hvor jeg føler mig som en sur citron, fordi jeg netop, når man er på arbejde så får man at vide at, hvis man så ikke gør tingene, så kan det godt virke sådan afvisende overfor folk ... altså hvis jeg ikke gør tingene. Så kan det godt være at jeg går og bliver sådan en sur citron en gang imellem. Denne skal forestille sådan et hestebid. Jeg har redet meget i lang tid, men det har jeg været nødt til at stoppe også, fordi der hvor jeg bor det er mest kun for ponyryttere og sådan nogle ting der. Men det savner jeg faktisk rigtig meget at kunne komme ud at ride en gang imellem. Også fordi jeg har redet 16 år plus minus. Det her det skal så repræsentere en bog. Mine medkursister har fundet ud af, at jeg kan godt lide at læse bøger. De fandt ud af at jeg er i gang med en bog. Når jeg får fat på en bog, som jeg bliver glad for, så bliver jeg meget optaget af den – så kan jeg faktisk glemme alt det her og så kan jeg sidde ned og læse bog i flere timer. Og det kan jeg godt lide – det er min måde at trække tilbage på. Spejlet det er min refleksion af at jeg føler, at jeg hele tiden går i den samme cirkel hele tiden. Fordi jeg har været ude for de samme ting hele tiden, og så er det noget med at jeg gerne vil lave det om, så jeg ikke skal se refleksionen igen næste gang. Og det er så det viskelæderet repræsenterer – at jeg gerne vil viske de dårlige oplevelser ud og erstatte med noget godt.

Og jeg har meget lys derhjemme [viser en lille fyrfadsstige] så det er sådan... ja, symboliserer sådan lidt håb og troen på at der er noget derude der... [fniser lidt opgivende]

Øh og denne her målestok det var ligesom at jeg havde målt mig meget på om jeg var god nok, og var jeg succesfuld nok, og kunne jeg de ting, som folk forventede af mig og sådan nogle ting der. Og der kan jeg sige, at min målestok er meget lille i forhold til, hvad jeg gerne vil og gerne vil lave, og måske ikke lever helt op til forventningerne fra omgivelserne.

Og så er der kameraet, som jeg også er min store hobby [anerkendende lyde fra de andre], og som jeg også rigtig gerne vil gøre mere ud af, og som jeg gerne vil... jeg skal finde albuerne ud til det, så jeg kan komme ud med det. Men det er også sådan lidt sammen med bogen der, bøgerne der, at det er min måde at komme videre på at komme ud på min flugt og komme væk fra mine dårlige dage. Så tager jeg kameraet og så går jeg tur og tager billeder.

Og taxaen der er så... jeg vil gerne tilbage til New York. Der er jo de gule taxaer derovre. Jeg vil gerne ud at rejse igen – det savner jeg også.

[Katja introducerer til runde to: Hvad arbejder du hen imod lige nu – hvad forventer du at fremtiden bringe?]

Anne: [Henvendt til Sebastian, der har samlet mange objekter i sit hjørne] Du skal starte, hvis vi skal være færdige i dag [alle griner højt].

Sebastian: Det kan jeg da godt. Jamen jeg kan starte med at sige, at jeg faktisk skal låne en ting, men det kommer...

Anne: At du hvad?

Sebastian: [Højere] At jeg skal låne en af jeres ting, men det kommer [griner]. Nej, men altså jeg har taget de her kort og den her lampe. Og det er ligeså meget fordi at nu igen mit CI-forløb fx, der har jeg rigtig meget sådan fået altså fået interesseret mig for det rigtig meget. Og med kortene kan man sige at det ligge ligesom i kortene, at det skulle jeg måske bruge til noget mere end det jeg allerede har gjort. Og så er det sådan set lidt min ide [griner] at jeg rigtig gerne vil meget mere...





Anne: At hvad?

Sebastian: Min idé er, at jeg vil meget mere oplysningsarbejde for alle dem her, som sådan set ... ligesom ... måske kunne være interesserede i CI eller noget. Og det er derfor jeg tager nogle vidt forskellige for ligesom også at symbolisere, at det er en temmelig broget flok, vi snakker om. Så jeg skal ikke fortælle noget om hver enkelt af dem – bare rolig [alle griner] men sideløbende med det her, jeg kan rigtig godt lide at sætte mig noget mere viden om hvad er CI [15.02 min] og hvad skal man sige... forskningen. Uden at skulle være forsker i det. Men jeg har jo allerede været til nogle konferencer fx, og det er

jo egentlig faktisk derfor jeg har tænkt, at jeg skulle egentlig låne denne her også [viser globussen] det kunne jeg godt tænke mig noget mere af, for jeg synes jo også det er rigtig fedt at komme lidt rundt og opleve noget samtidig med.

Anne: er det på den måde forstået at give nogle informationer til øh....

Sebastian: Det er så mest herhjemme. Men det her er mere i forhold til at få viden... ja.

Anne: Hmm mm, ja.



Sebastian: Ja, det var det.



Anne: Jeg har sådan en fisk her. Den svømmer bare hvileløst rundt i det der akvarie der. Fra den ene side til den anden, eller hvordan jeg lige skal forklare det. Svømmer lidt hvileløst rundt, fordi jeg ved godt hvad jeg skal, men hvad vil jeg? Det ved jeg ikke. Og hvad arbejder jeg hen imod? Altså jeg ved da godt, at jeg skal have et arbejde, men hvad er det for et arbejde, jeg gerne vil? Og hvad er det for en hylde? Aner det ikke. Så jeg svømmer lidt rundt. Det er det, jeg er: lidt hvileløs. Ja. Så er det dig.

[16.24 min]

Lisbeth: Er det mig? Men må jeg ikke godt få Grisling? [rumsteren] Nej det skal være Grisling [flere griner] - alle ved hvad Grisling består af [griner]. Jeg har valgt fem ting, og jeg blev så inspireret af Karen, da hun sagde at det her [linealen] var i forhold til hende følelser. Så sætter jeg selvværd på – jeg håber den kan strækkes helt ud, så mit selvværd bliver helt stort. Lige nu er den sådan her [viser en sammenfoldet lineal]. Og den her den tænker jeg øh... både arbejde og fritid – altså mig som hel person med energi. Masser af energi. Altså jeg vil frygtelig gerne kunne overskue det hele. Men samtidig lære at passe på mig selv. Det her det er arbejde [tager kalejdoskopet]. Når man kigger ind i den, så udvikler den sig. Det vil jeg gerne også samtidig med at jeg gerne vil have trykke rammer. Øh denne her [tager den lille kylling] den har jeg taget med, fordi jeg synes, at den er lavet flot, så jeg håber på at mit kreative gen det kommer frem igen. Jeg har været meget kreativ

engang... øh... er det knap så meget mere. Så den vil jeg gerne have frem igen også. Og så tog jeg denne her med, fordi jeg vil gerne blive ved med at være så omsorgsfuld og så 'grøn' [henviser til en profil, der er lavet på kurset] som jeg egentlig er testet til at være. Det vil jeg gerne blive ved med, men jeg vil gerne have noget mere slevtillid [man hører anerkendende lyde fra de andre].

[18.13 min]

[rumsteren med skift af mikrofon]



Karen: Vi kan se, at der er nogle ting, der stadigvæk er der. Øhm... jeg har sådan lidt løst, fordi jeg står i en situation, hvor jeg ikke rigtig ved, hvor jeg vil hen ad, fordi jeg har nogle dårlige oplevelser. Jeg har det sådan lidt... hvor skal jeg finde tilliden til at vende tilbage igen? Faktisk så har jeg... jeg skriver selv meget så faktisk så har jeg skrevet en lille roman eller en novelle på 300 sider, som jeg skal have kigget igennem. Den er faktisk på engelsk, så jeg skal lige have den kigget igennem og se om jeg kan få den udgivet. Og det er igen det der med at finde troen på, at det godt kan lade sig gøre. Og det er det samme med mit kamera og troen på at jeg kan få solgt mine billeder og... som jeg gerne vil håbe på at det kan bringe mig ud på en rejse, hvor jeg gerne vil tilbage til New

York og få nogle kontakter derovre. For jeg har mange venner rundt omkring i verden, som jeg også godt kunne tænke mig at komme ud og besøge og se dem rigtigt, for det er kun over e-mails og Twitter. Men så har jeg også en drøm om at jeg også gerne vil have min egen familie. Og tiden er ved at løbe ud, så det er sådan et valg, jeg skal til at træffe nu – hvilken vej jeg skal hen ad. Så det er sådan en blanding af det hele. Selvom jeg håber på at få samarbejde på en eller anden måde. Så rent arbejdsmæssigt så ved jeg ikke rigtigt hvor jeg står henne men alligevel er

der sådan lidt arbejdsrelationer, fordi det er nogle ting, jeg godt kan lide at arbejde med og som giver mig glæde. For når man hele tiden får at vide at man... ”lav det, du godt kan lide at lave”... og så er det det at få det til at fungere. Så det er hvad det repræsenterer for mig.







## RESUMÉ

Idéen om denne Ph.D. er vokset ud af et ønske om at afdække de faktorer, der ligger til grund for, at personer med høretab oplever stress, som kan resultere i stressrelateret sygefravær fra arbejdspladsen. Målgruppen er erhvervsaktive personer med høretab, som anvender det talte og auditive sprog som det primære. Studiet bygger på en biopsykosocial stressforståelse og en salutogenetisk overbevisning, der handler om, at forskellige aspekter og kontekster i livet hænger uløseligt sammen og at helheden af disse kontekster er afgørende for vores evne til at håndtere de stressorer, vi møder i vores daglige liv.